ORDER NO. BSD0212M004
D21

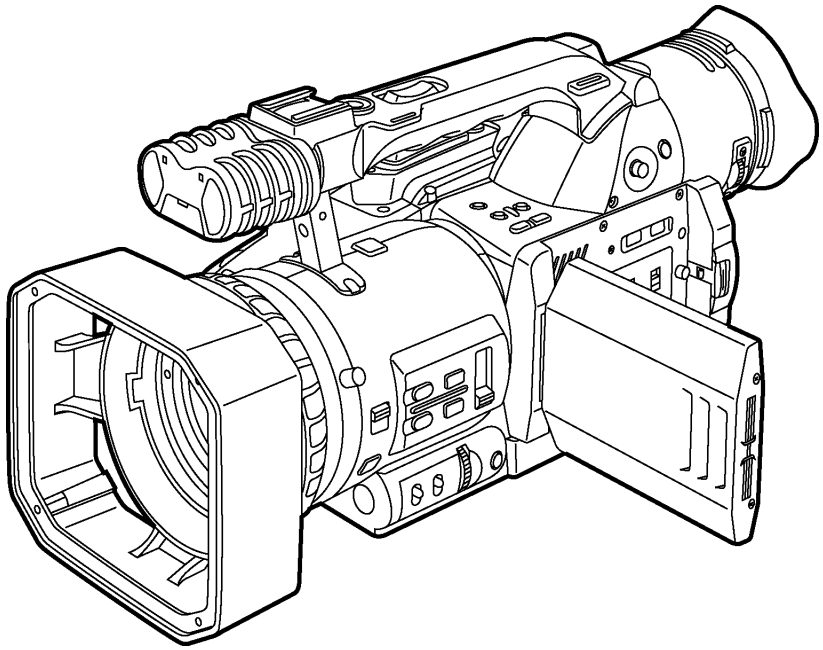
Service Manual

Sec. 1 Service Information
Sec. 2 Disassembly Procedures
Sec. 3 Mechanical Adjustment
Sec. 4 Electrical Adjustment
Sec. 5 Block Diagrams
Sec. 6 Schematic Diagrams
Sec. 7 Circuit Board Diagrams
Sec. 8 Exploded Views & Replacement Parts List

Mini DV NTSC

Digital Video Camera Recorder

AG-DVX100P



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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Specifications

[GENERAL]

Supply voltage: DC 7.2/7.9 V
Power consumption:
6.8 W (when viewfinder is used)
7.8 W (when LCD monitor is used)
9.2 W (max.)

▭ indicates safety information.

Ambient operating temperature
32°F to +104°F (0°C to +40°C)
Ambient operating humidity
10% to 85% (no condensation)
Weight
3.652 lb (1.66 kg)
(excluding battery and accessories)
Dimensions (W×H×D)
5 1/2×6 5/16×14 3/8 inches
(139×160×364 mm)
Recording format
Digital video SD format
Tape format
Mini DV
Recorded video signals
525i (NTSC)
In the progressive mode, the signals are converted into the 525i system and recorded.
Shooting mode
60i (525i)
Progressive mode (30P, 24P or 24P advance)
Recorded audio signals
PCM digital recording
16 bits: 48 kHz/2 channels
12 bits: 32 kHz/4 channels
Recording tracks
Digital video, audio signals:
helical track
Time code:
helical track (sub-code area)
Tape speed
SP mode: 18.812 mm/sec.
LP mode: 12.555 mm/sec.
Recording time (when AY-DVM60 is used)
SP mode: 60 minutes
LP mode: 90 minutes
Tape used
6.35 mm wide metal tape
FF/REW time
Approx. 85 sec. (when AY-DVM60 is used)
Pick-up device
Interline transfer 1/3-inch CCD image senser (×3)
Number of pixels
Total number of pixels: 410,000,
Number of effective pixels: 380,000
(pixel offset system)
Lens
Leica DICOMAR optical image stabilizer lens, motorized/manual mode switching, 10× zoom
F1.6 (f = 4.5 to 45 mm)
(35 mm equivalent: 32.5 to 325 mm)
Optical system
Prism system
ND filters
1/8, 1/64
Gain
0, +3, +6, +9, +12, +18 dB (60i mode only)
Shutter speeds
Preset
60i mode:
1/60 (OFF), 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 sec.
30P mode:
1/30, 1/50 (OFF), 1/60, 1/120, 1/250, 1/500, 1/1000 sec.
24P, 24P (ADV) mode:
1/24, 1/50 (OFF), 1/60, 1/120, 1/250, 1/500, 1/1000 sec.
Synchro scan
60i mode:
1/60.3 to 1/250.0 sec.
30P mode:
1/30.1 to 1/250.0 sec.
24P, 24P (ADV) mode:
1/24.1 to 1/250.0 sec.
Minimum subject illuminance
3 lux (F1.6, 18 dB gain, 50 IRE video output)
Lens hood
Large-sized lens hood with wide angle of view
Filter diameter
72 mm
LCD monitor
3.5-inch LCD color monitor, 200,000 pixels
Viewfinder
0.44-inch LCD color viewfinder, 180,000 pixels
Internal microphone
Stereo microphone
Internal speaker
20 mm diameter

Specifications

[VIDEO]

Sampling frequency
Y: 13.5 MHz, PB/PR: 3.375 MHz
Quantizing
8 bits
Video compression system
DCT + variable length code
Error correction
Reed-Solomon product code

[AUDIO]

Sampling frequency
48 kHz/32 kHz
Quantizing
16 bits/12 bits
Frequency response
20 Hz to 20 kHz
Wow & flutter
Below measurable limits

[CONNECTORS]

VIDEO IN/OUT (input/output automatically switched)
Pin jack, analog composite input/output, 1.0 V [p-p], 75 Ω
S-VIDEO IN/OUT (input/output automatically switched)
S-connector, Y/C separate signal input/output, Y: 1.0 V [p-p], C: 0.286 V [p-p], 75 Ω
AUDIO IN/OUT (input/output automatically switched)
Pin jacks ×2 (CH1, CH2)
Input: 316 mV, high impedance
Output: 316 mV, 600 Ω
DV
4-pin, digital input/output, IEEE 1394 standard complied with
INPUT 1, INPUT 2
XLR (3 pins) ×2 (CH1, CH2)
LINE/MIC switching, high impedance
LINE : 0 dBu
MIC : –50 dBu/–60 dBu (menu selection)
DC INPUT
7.9 V
PHONES
Stereo (3.5 mm diameter), 77 mV, 32 Ω
CAM REMOTE
Mini jack (2.5 mm diameter)

[AC ADAPTER]

Power Source:
110/120/220/240 V AC, 50/60 Hz
Power Consumption:
18 W

indicates safety information.

Weight
0.35 lb (0.16 kg)
Dimensions (W×H×D)
2 13/16×1 13/16×4 5/8 inches
(70×44.5×116 mm)

[OPTIONAL ACCESSORIES]

Wide conversion lens
AG-LW7208G
16:9 conversion lens
AG-LA7200G
XLR microphone
AG-MC100G
Hard carrying case
AG-HT100G
Soft carrying case
AG-SC100G
Battery
CGR-D08 (800 mAh)
CGR-D16 (1600 mAh: product equivalent to battery supplied)
CGP-D28 (2800 mAh)
AC adapter kit
AG-B15 (product equivalent to AC cable, DC cable and AC adapter supplied)
Cleaning tape
AY-DVMCL

Weight and dimensions shown are approximate. Specifications are subject to change without notice.

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been over-heated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. The resistance value must be more than 5MΩ.

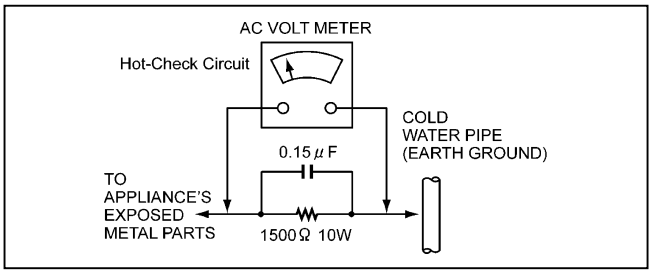

Figure1

LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.
   Do not use an isolation transformer for this check.
2. Connect a 1.5KΩ, 10W resistor, in parallel with a 0.15μ F capacitor, between each exposed metallic part on the set an a good earth ground such as a water pipe, as shown in Figure1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.15 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 0.1 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ABOUT LEAD FREE SOLDER (PbF)

Distinction of Pbf PCB:
PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.
Caution:

1. Pb free solder has a higher melting point than standard solder; Typically the melting point is 50–70˚F (30-40˚C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 700±20˚F (370±10˚C).
2. Pb free solder will tend to splash when heated too high (about 1100˚F/600˚C).

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ED) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.
   Alternatively, obtain and wear a commercially available discharging wrist trap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as “anti-static” can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it.
   (most replacement ES devices are package with leads electrically shorted together by conductive foam, alminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

X-RADIATION

WARNING

1. The potential source of X-radiation in EVF sets is the High Voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that jig is capable of handling 10kV without causing X-Radiation.

Note : It is important to use an accurate periodically calibrated high voltage meter.

3. Measure the High Voltage. The meter (electric type) reading should indicate 2.5kV,±0.15kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure. To prevent an X-Radiation possibility, it is essential to use the specified picture tube.

IMPORTANT

"Unauthorized recording of copyrighted television programs, video tapes and other materials may infringe the right of copyright owners and be contrary to copyright laws."

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER TO SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (service) instructions in the literature accompanying the appliance.

WARNING:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, KEEP THIS EQUIPMENT AWAY FROM ALL LIQUIDS-USE AND STORE ONLY IN LOCATIONS WHICH ARE NOT EXPOSED TO THE RISK OF DRIPPING OR SPLASHING LIQUIDS, AND DO NOT PLACE ANY LIQUID CONTAINERS ON TOP OF THE EQUIPMENT.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

CAUTION:

Do not install or place this unit in a bookcase, built-in cabinet or any other confined space in order to maintain adequate ventilation. Ensure that curtains and any other materials do not obstruct the ventilation to prevent risk of electric shock or fire hazard due to overheating.

FCC Note:

This device complies with Part 15 of the FCC Rules. To assure continued compliance follow the attached installation instructions and do not make any unauthorized modifications.

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION:

Danger of explosion or fire if battery is mistreated.

- Replace only with same or specified type.
- Do not disassemble or dispose of in fire.
- Do not store in temperatures over 60°C.
- Use specified charger for rechargeable batteries.
- Do not recharge the battery if it is not a rechargeable type.

For Remote Controller

- Replace battery with part No. CR2025 only.
- Do not recharge the battery.

indicates safety information.

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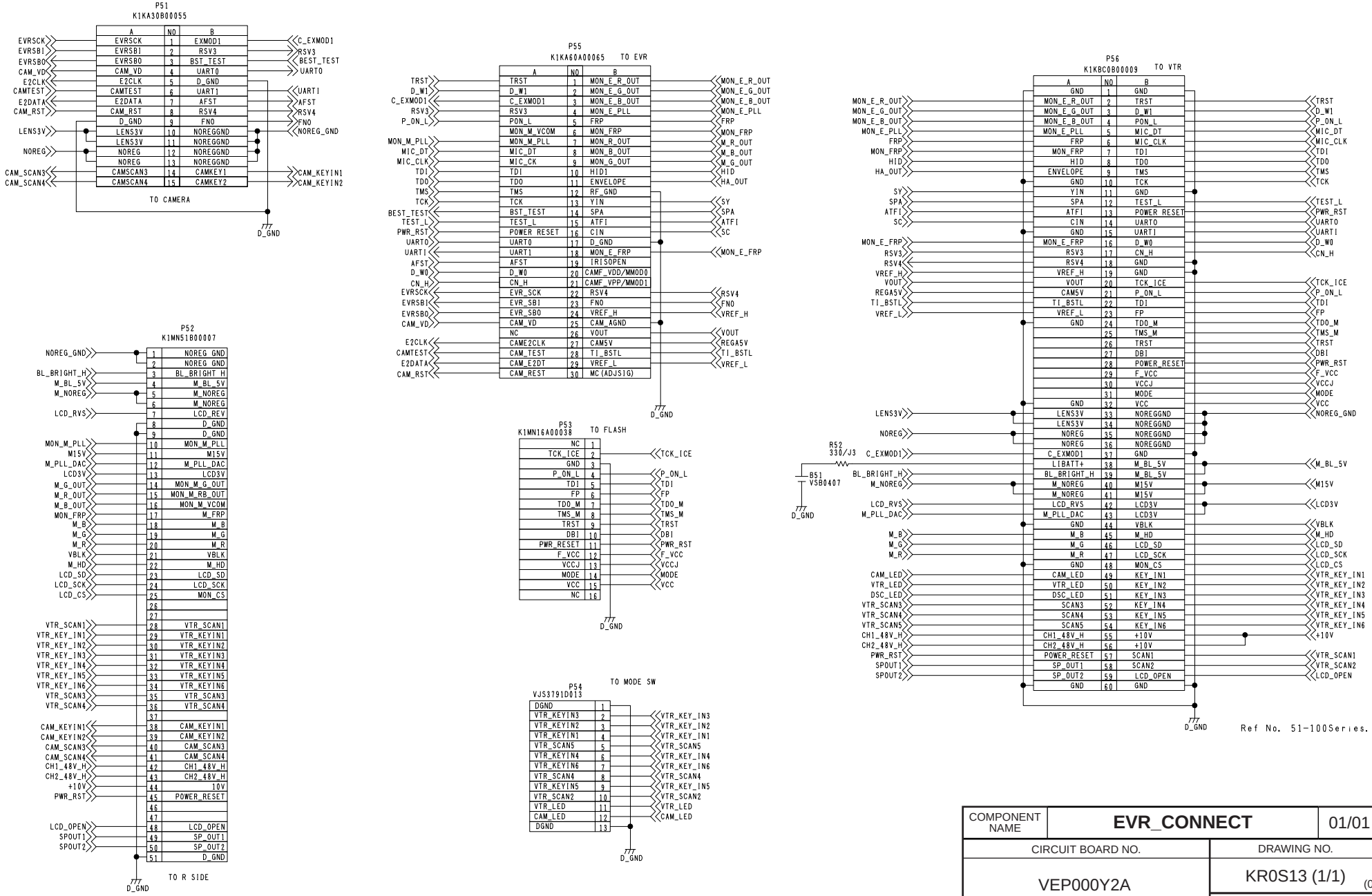
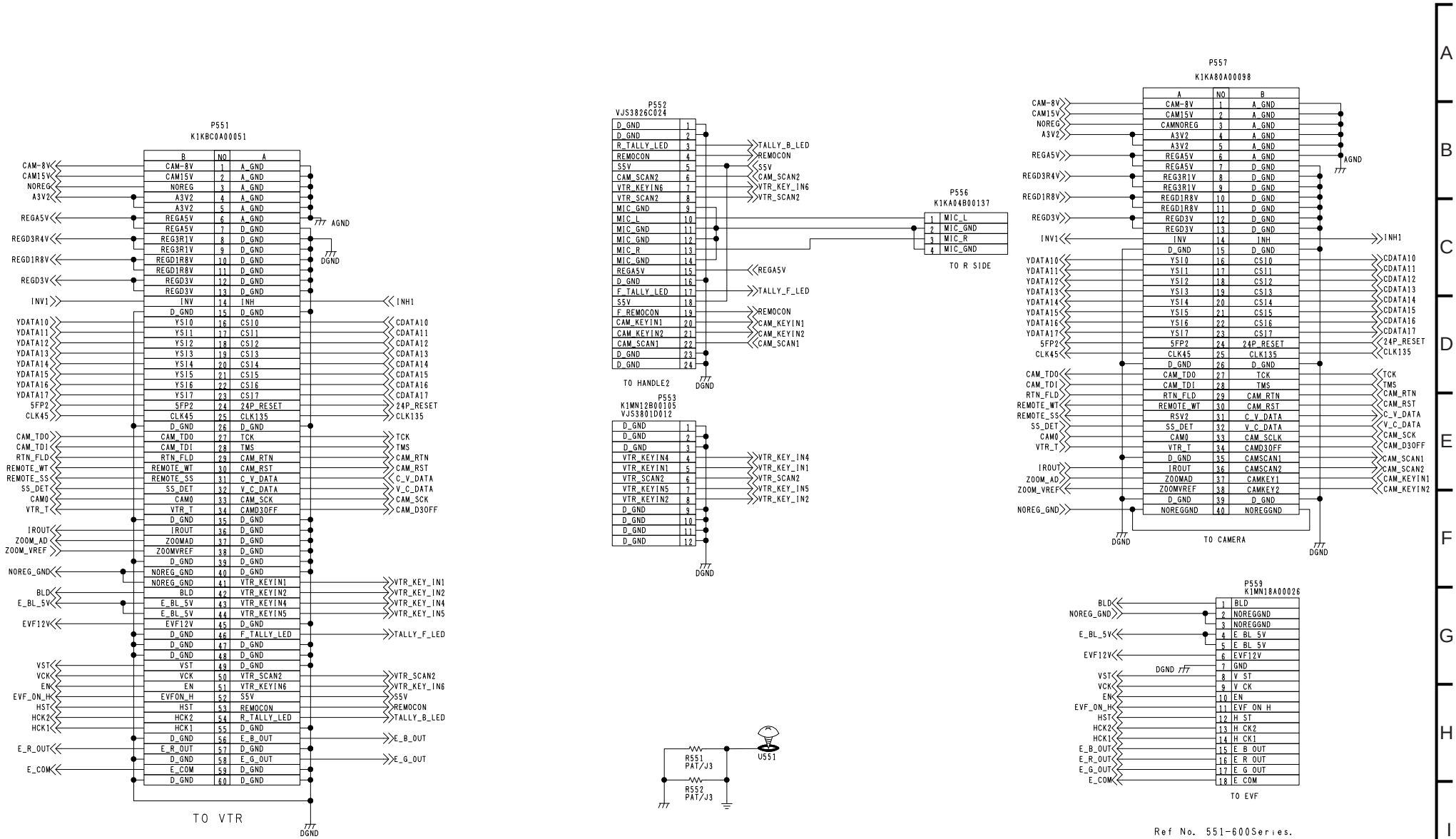
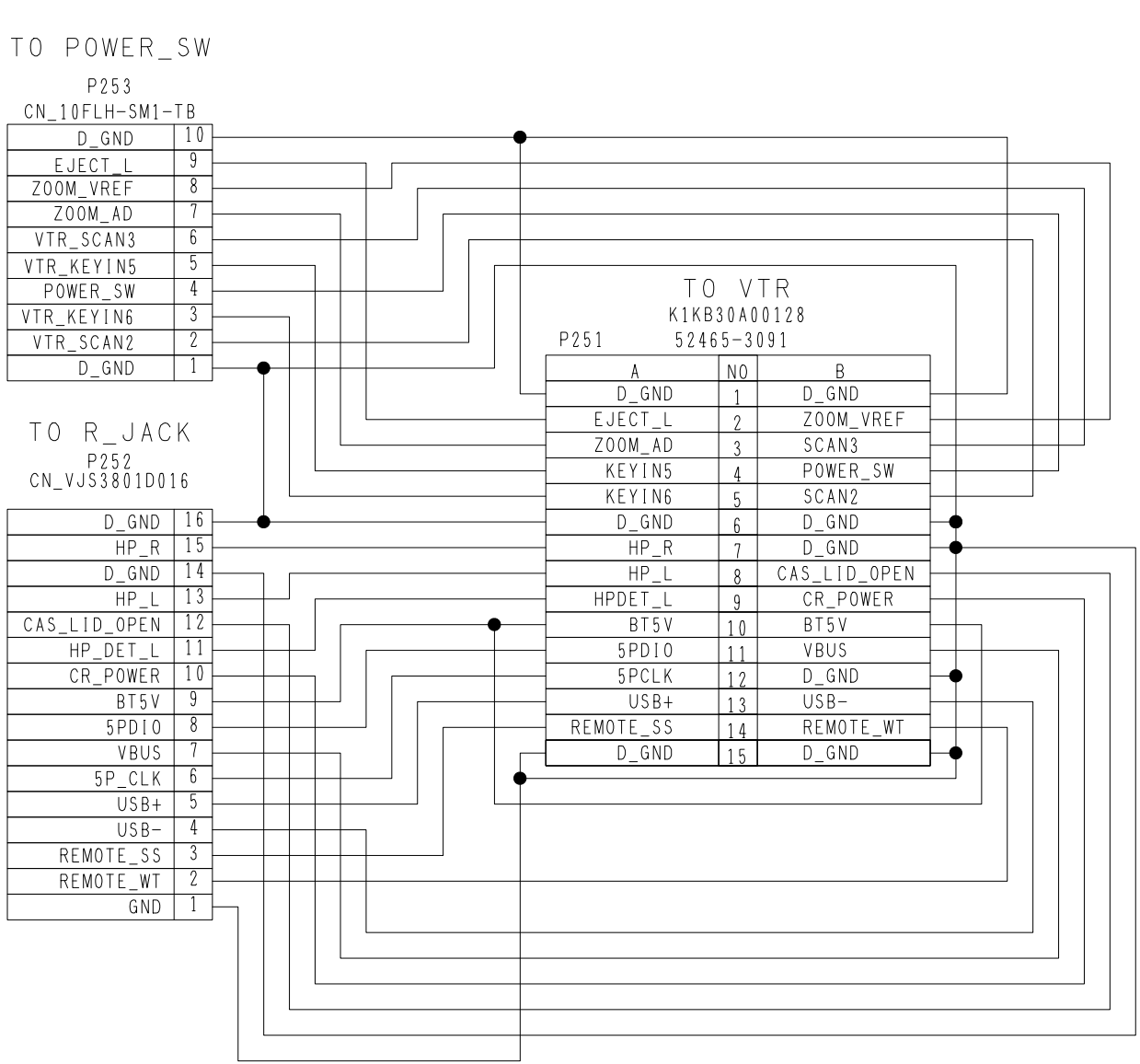
FCD0212NHMK125P



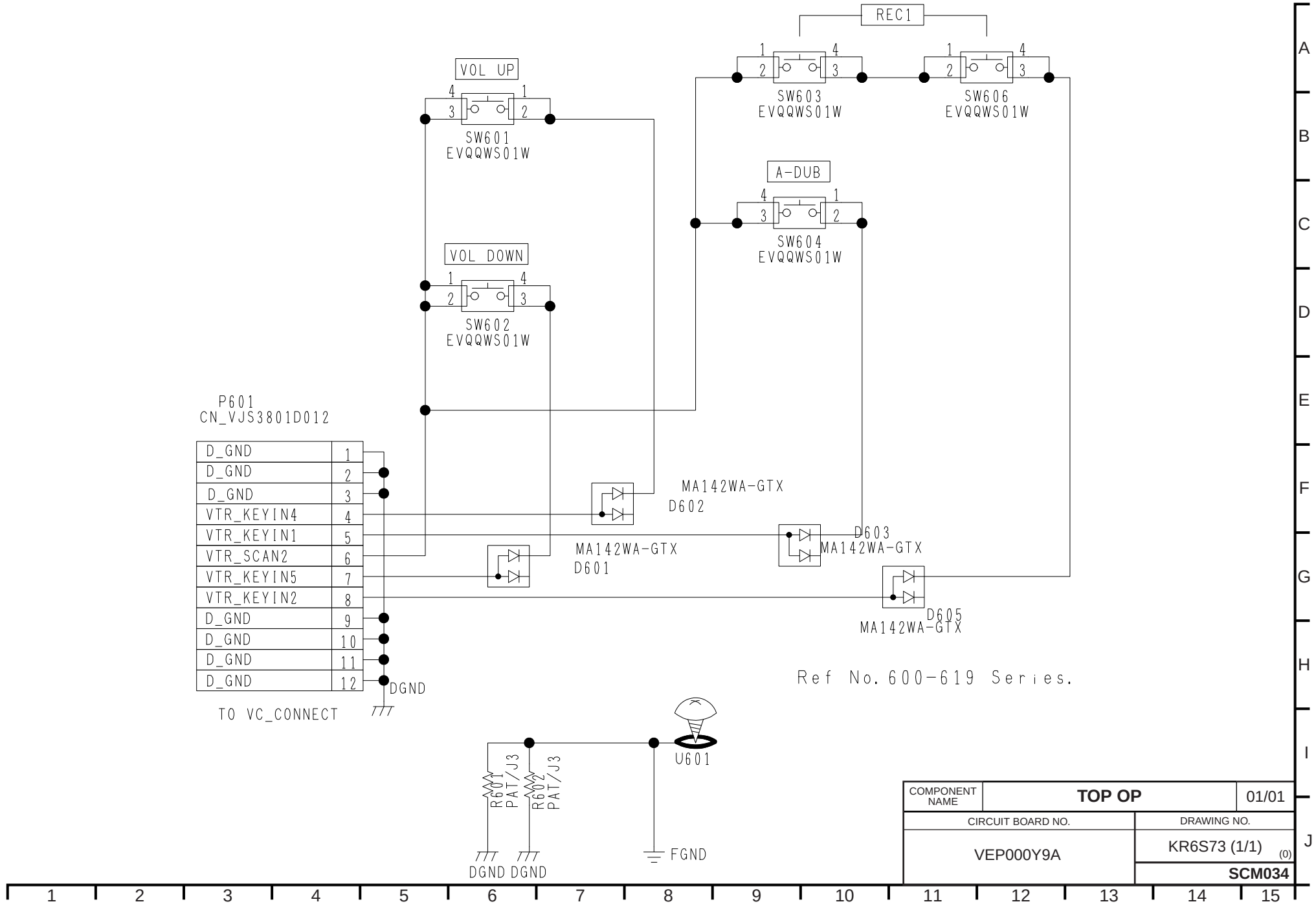
COMPONENT NAME	EVR_CONNECT
	01/01
CIRCUIT BOARD NO.	DRAWING NO.
VEP000Y2A	KR0S13 (1/1) (0)
	SCM029



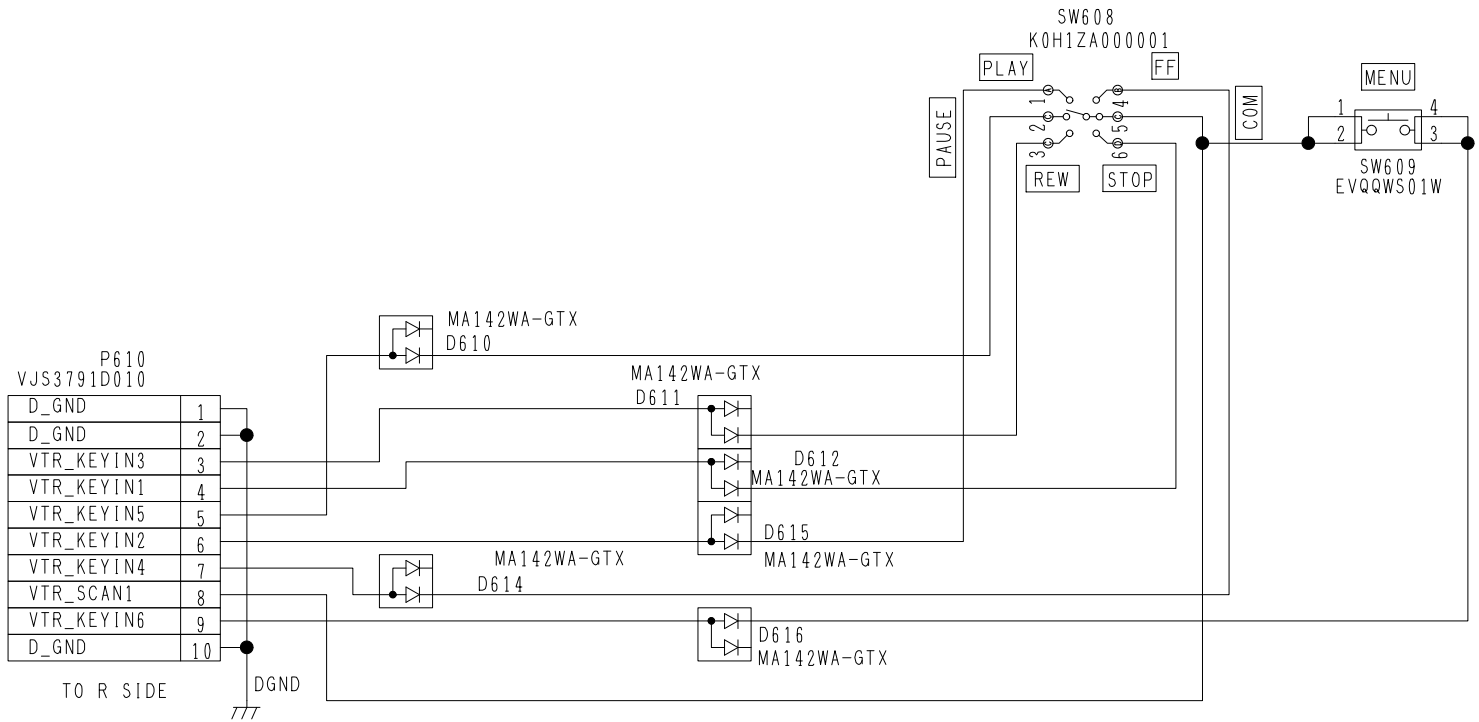
COMPONENT NAME	VC_CONNECT	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP000Y3A		KR0S14 (1/1) (0)
		SCM030



COMPONENT NAME	REAR JACK CONNECT FLEX	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP000Y6A		KR0S33 (1/1) (0)
		SCM031

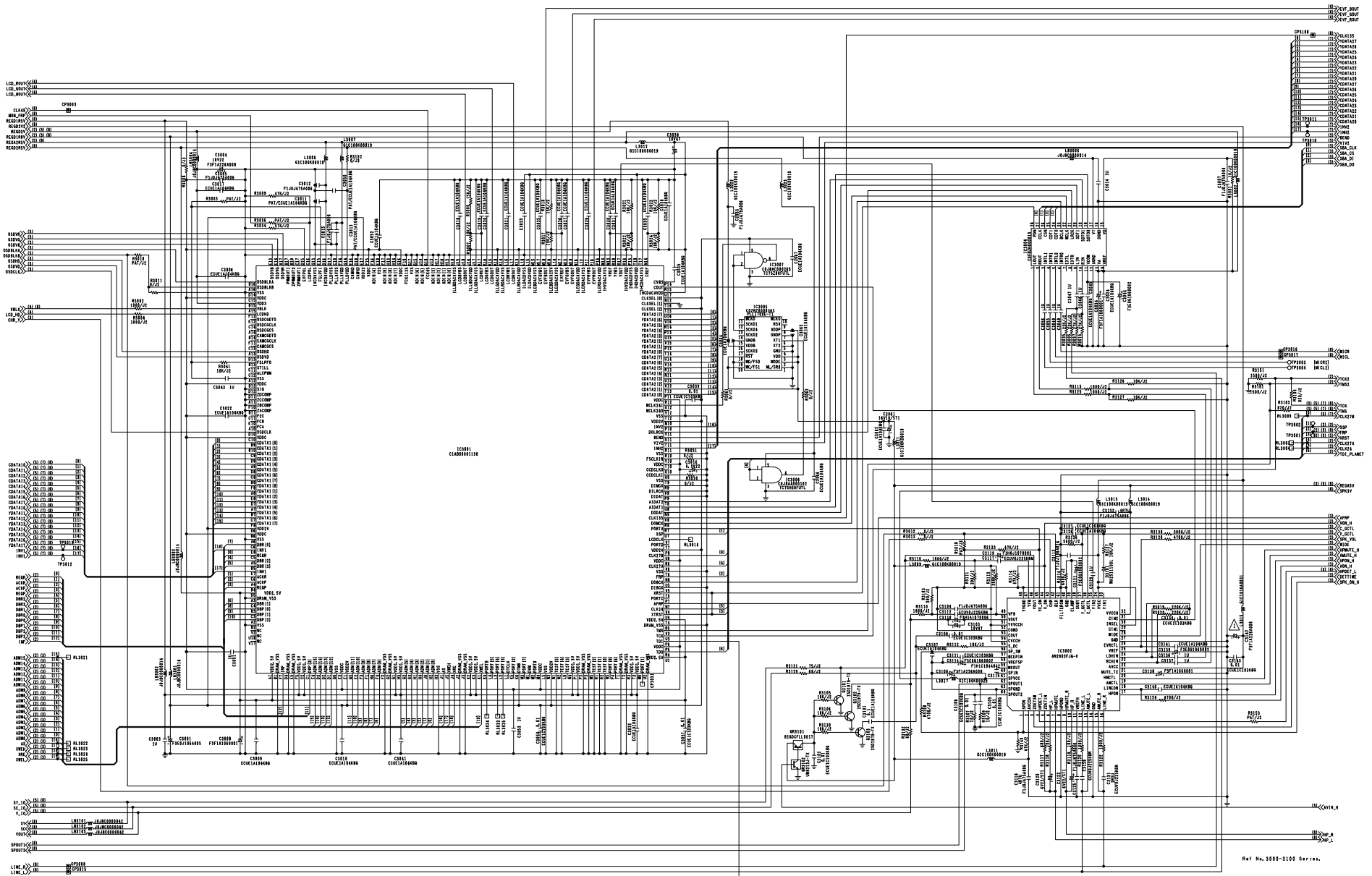


COMPONENT NAME	**TOP OP**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Y9A	KR6S73 (1/1) (0)	
	SCM034	

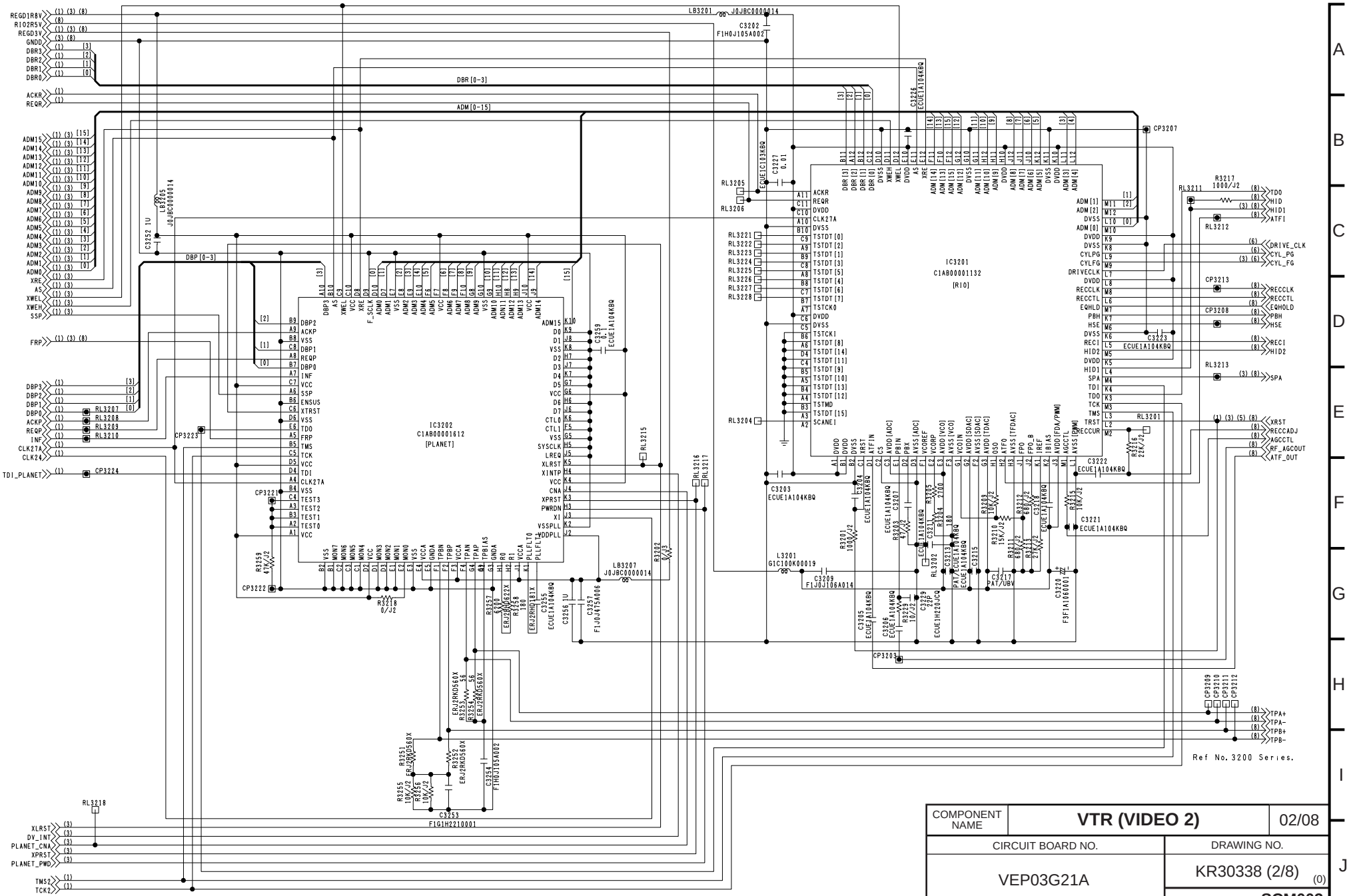


Ref No. 601-650 Series.

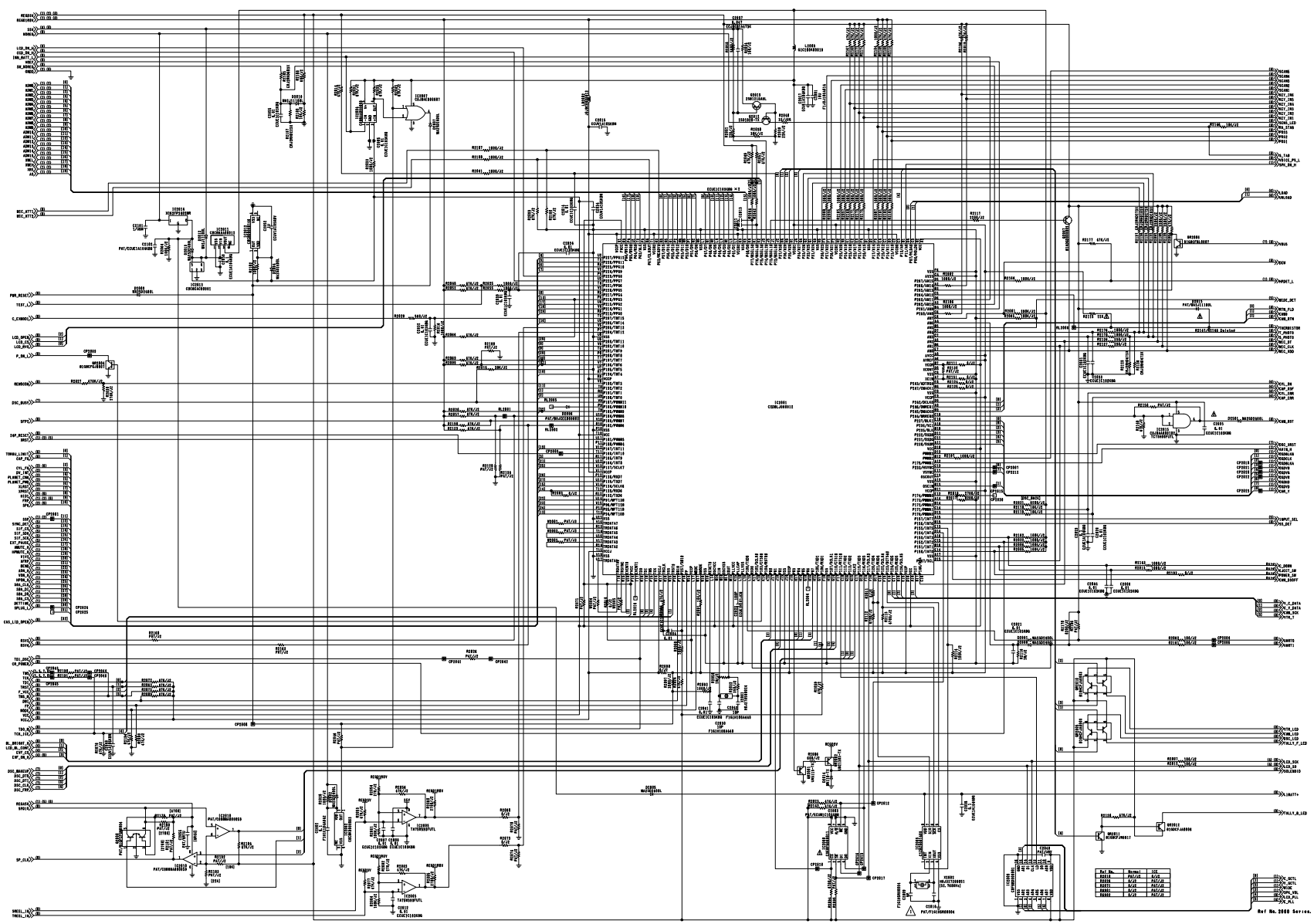
COMPONENT NAME	**MENU**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Z0A	KR0S74 (1/1) (0)	
	SCM024	



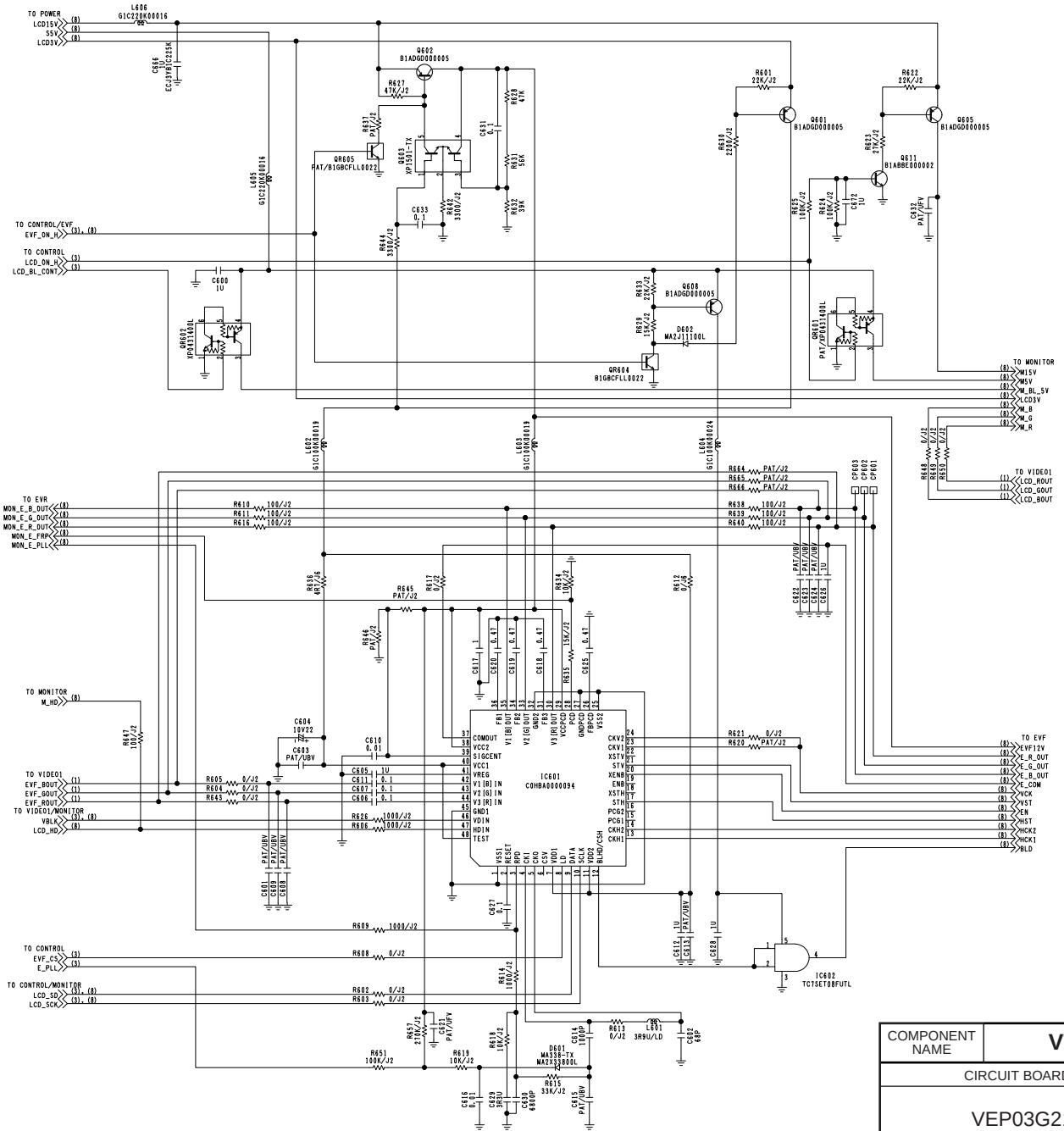
COMPONENT NAME	**VTR (VIDEO 1)**	01/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP03G21A	KR30338 (1/8)-1 (0)	
	SCM002	



COMPONENT NAME	**VTR (VIDEO 2)**	02/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (2/8) (0)
		SCM003



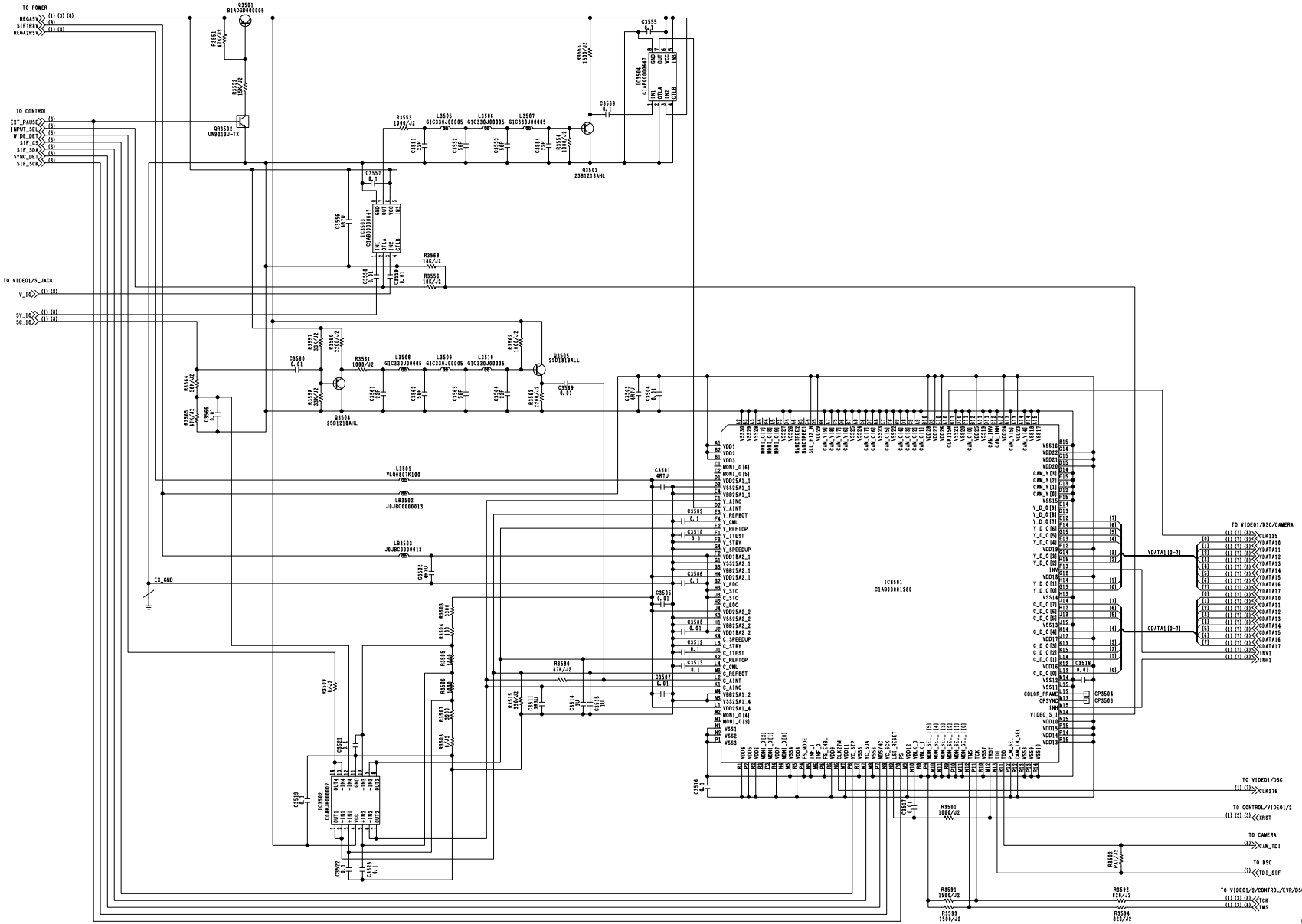
COMPONENT NAME	VTR (CONTROL)	03/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (3/8) (0)
		SCM004



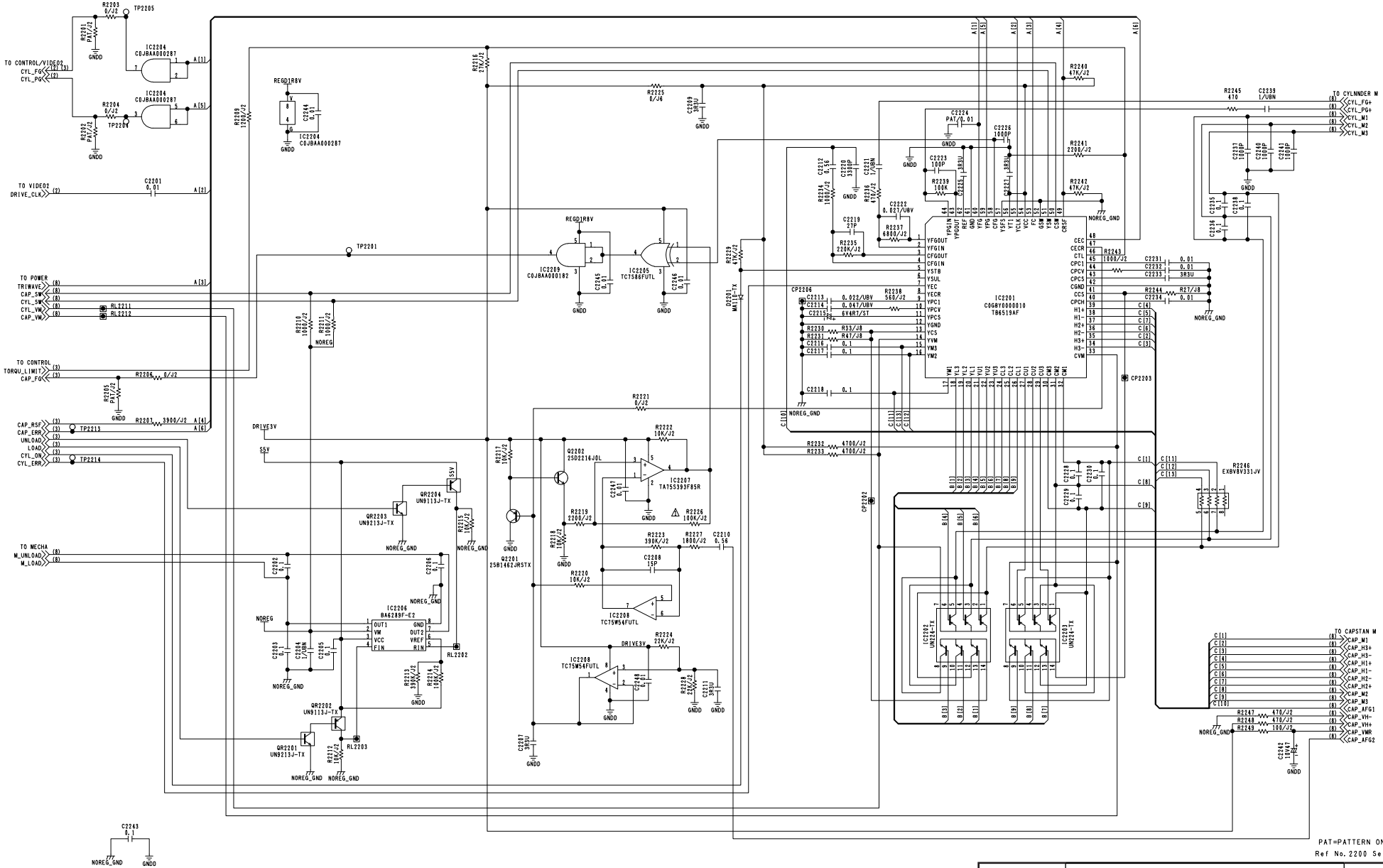
PAT=PATTERN ONLY
Ref No. 600 Series.

Ref No.	NTSC	PAL
R651	100k/J2	120k/J2

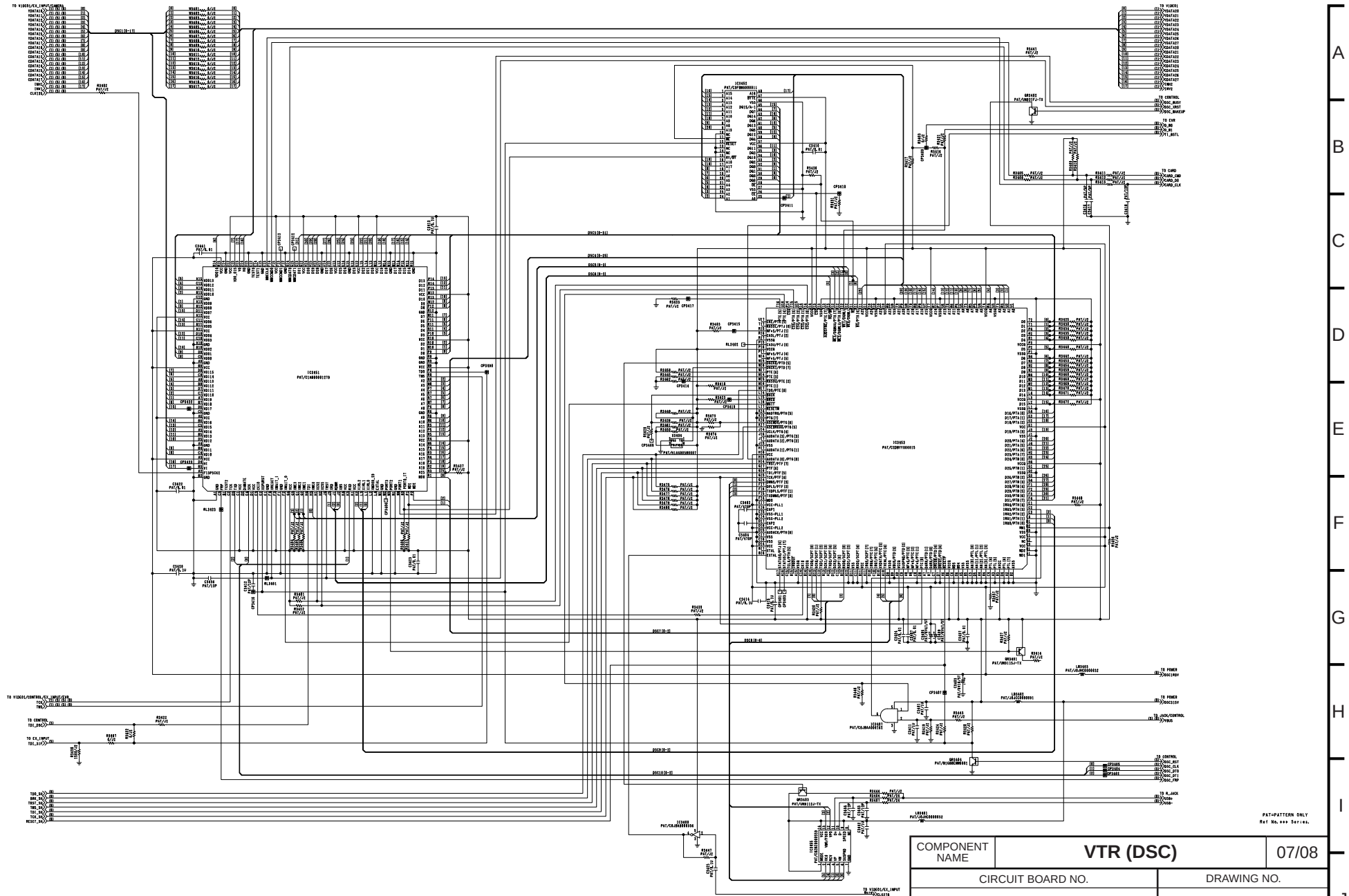
COMPONENT NAME	VTR (EVF DRIVER)	04/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (4/8) (0)
		SCM005



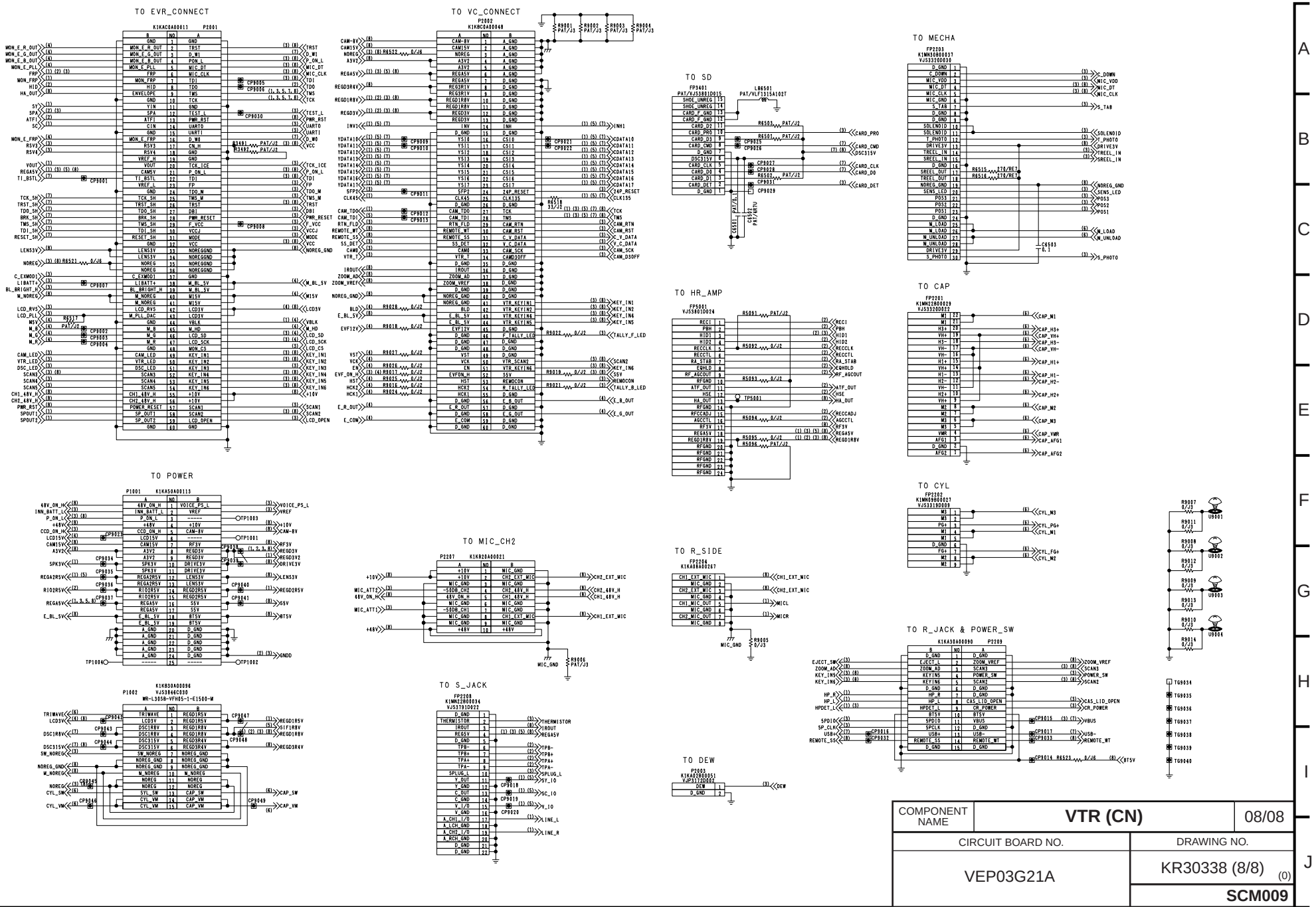
COMPONENT NAME	VTR (EX_INPUT)	05/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP03G21A	KR30338 (5/8) (0)	
	SCM006	

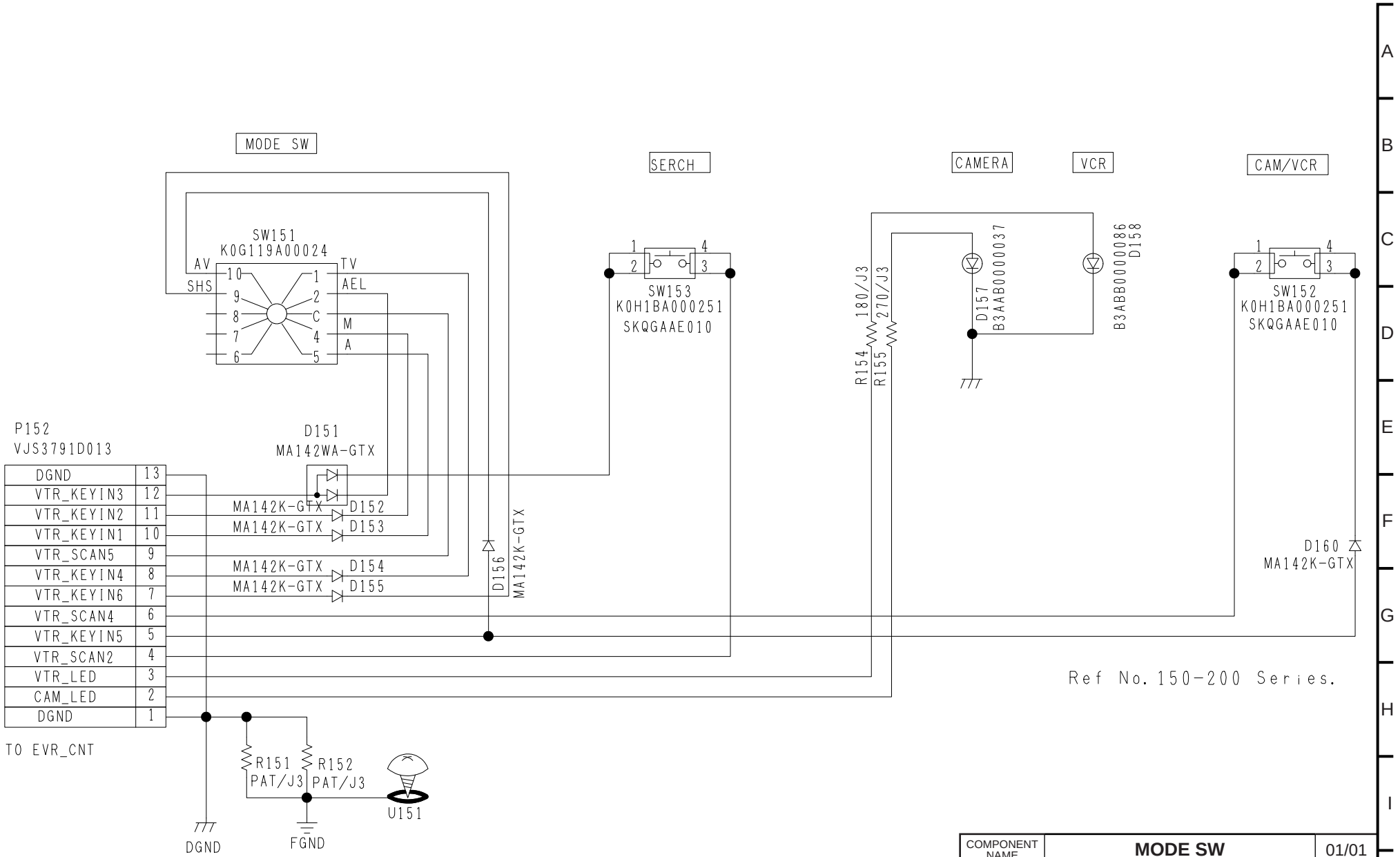


COMPONENT NAME	VTR (DRIVE)	06/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (6/8) (0)
		SCM007

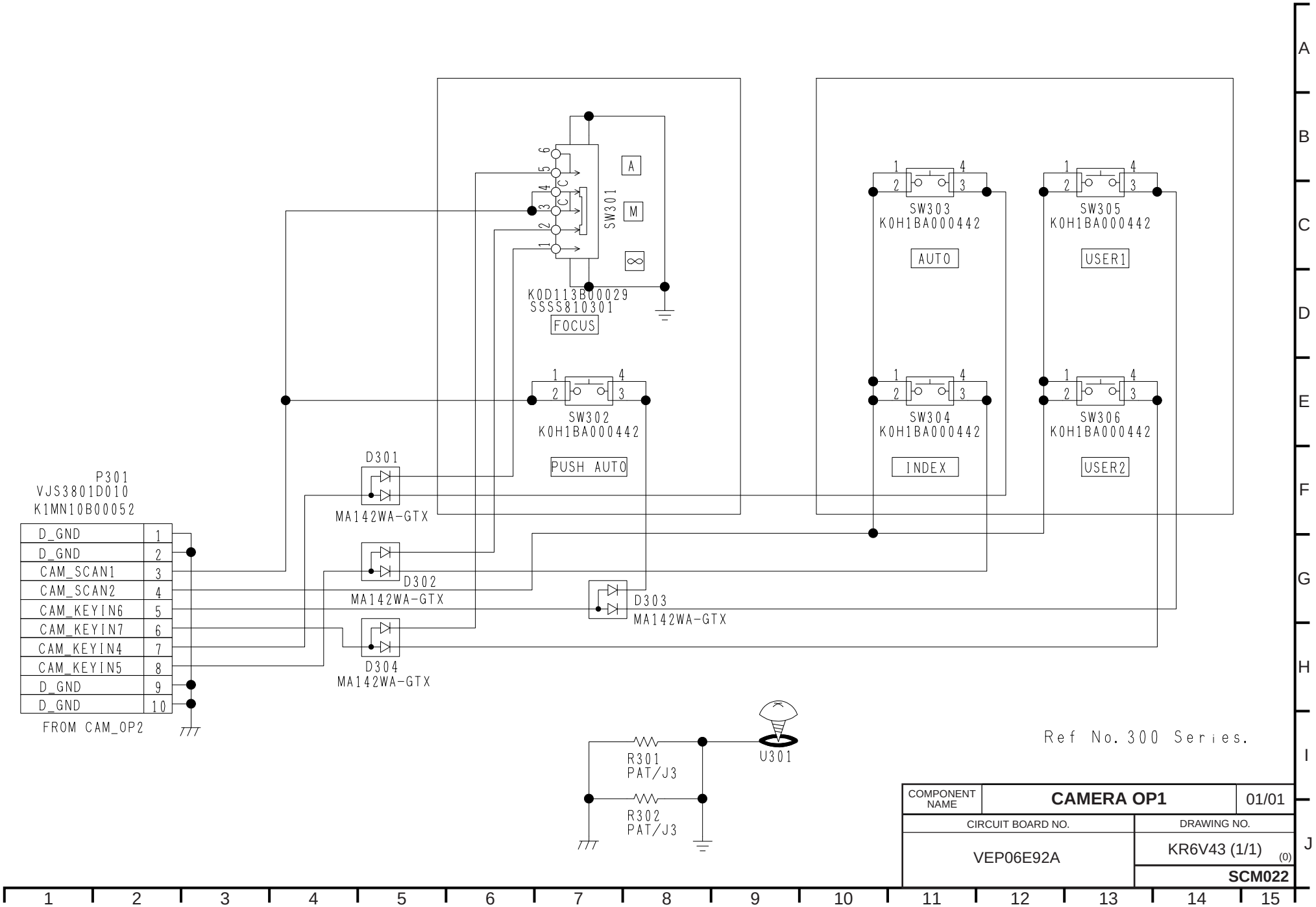


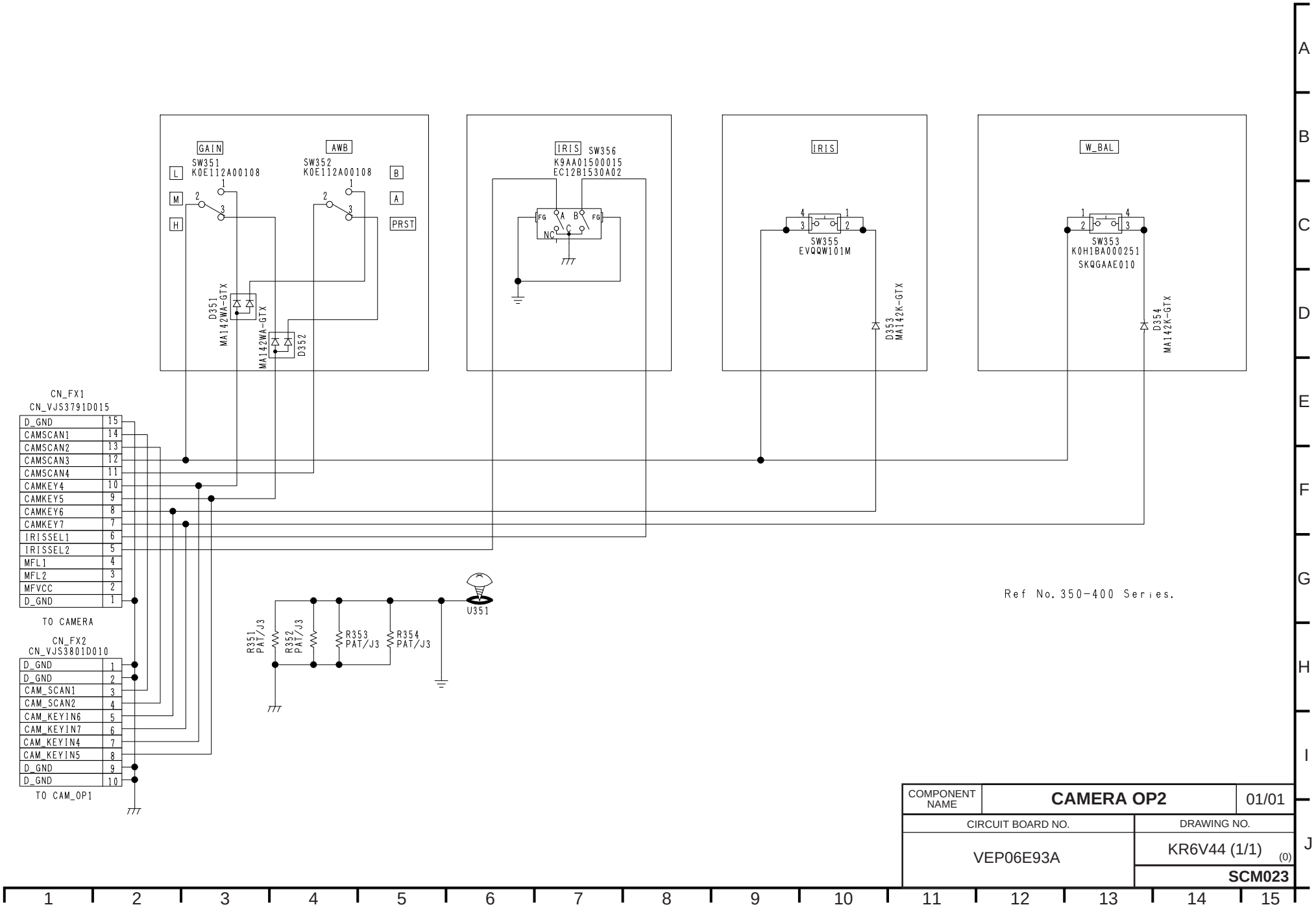
COMPONENT NAME	**VTR (DSC)**	07/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (7/8) (0)
		SCM008


TO EVR_CONNECT
TO VC_CONNECT
TO MECHA
TO SD
TO HR_AMP
TO CAP
TO POWER
TO MIC_CH2
TO CYL
TO R_SIDE
TO R_JACK & POWER_SW
TO S_JACK
TO DEW
COMPONENT NAME
VTR (CN)
08/08
CIRCUIT BOARD NO.
VEP03G21A
DRAWING NO.
KR30338 (8/8) (0)
SCM009

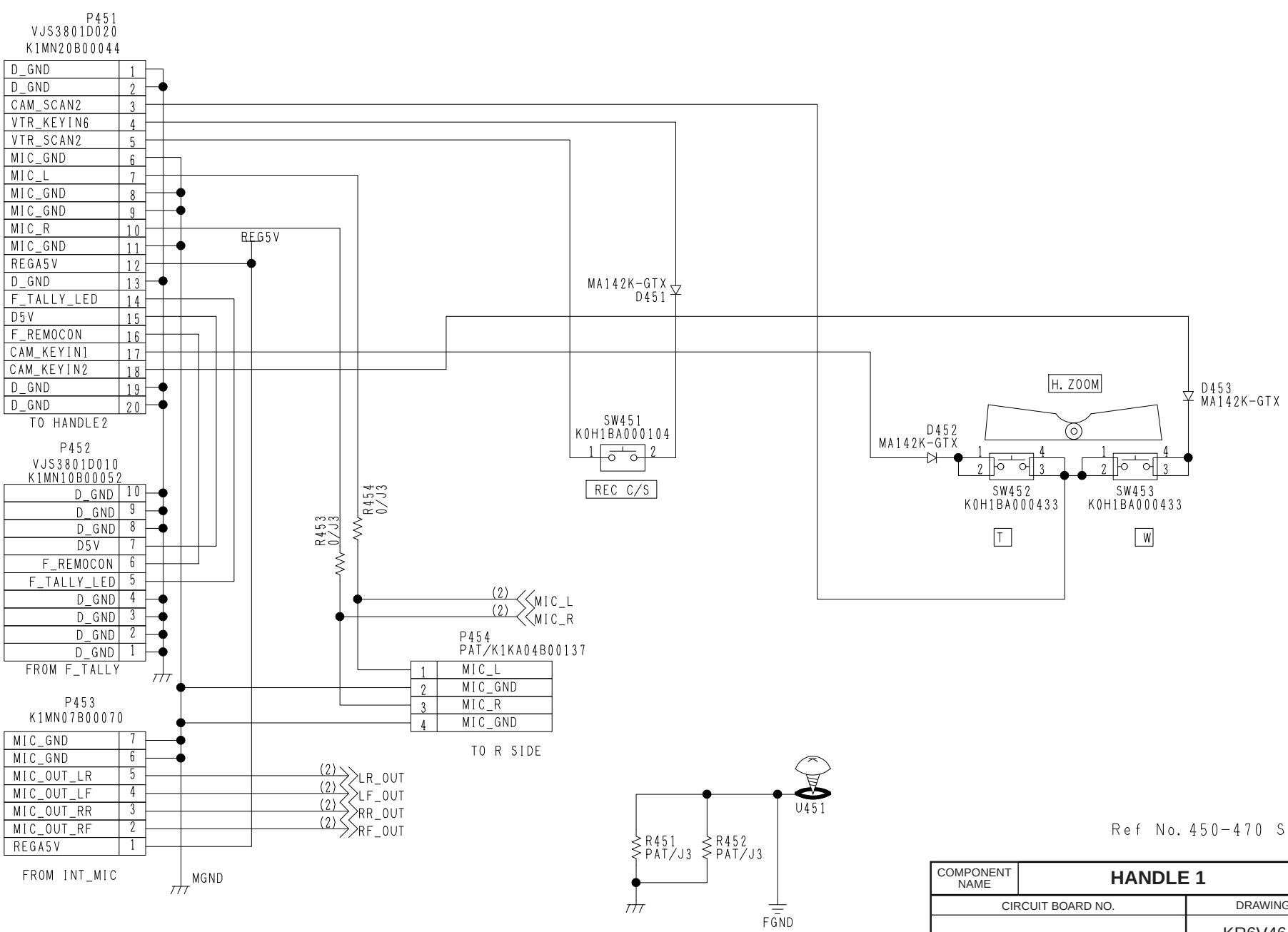


COMPONENT NAME	MODE SW	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP06E89A		KR6V40 (1/1) (0)
		SCM041

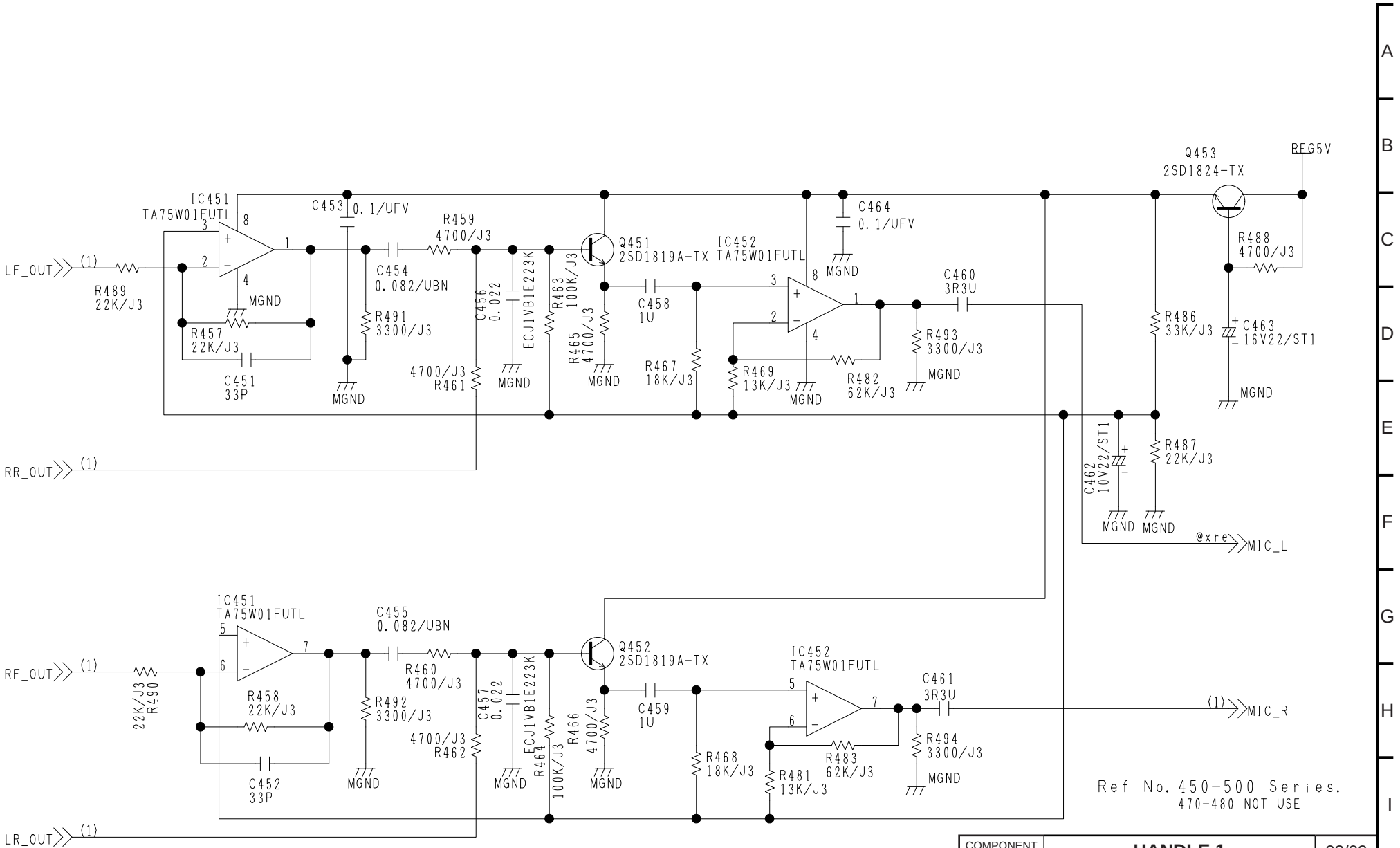

P301
VJS3801D010
K1MN10B00052
D_GND 1
D_GND 2
CAM_SCAN1 3
CAM_SCAN2 4
CAM_KEYIN6 5
CAM_KEYIN7 6
CAM_KEYIN4 7
CAM_KEYIN5 8
D_GND 9
D_GND 10
FROM CAM_OP2
SW301
K0D113B00029
SSSS810301
FOCUS
A
M
SW302
K0H1BA000442
PUSH AUTO
SW303
K0H1BA000442
AUTO
SW304
K0H1BA000442
INDEX
SW305
K0H1BA000442
USER1
SW306
K0H1BA000442
USER2
D301
MA142WA-GTX
D302
MA142WA-GTX
D303
MA142WA-GTX
D304
MA142WA-GTX
R301
PAT/J3
R302
PAT/J3
U301
Ref No. 300 Series.
COMPONENT NAME
CAMERA OP1
01/01
CIRCUIT BOARD NO.
VEP06E92A
DRAWING NO.
KR6V43 (1/1) (0)
SCM022



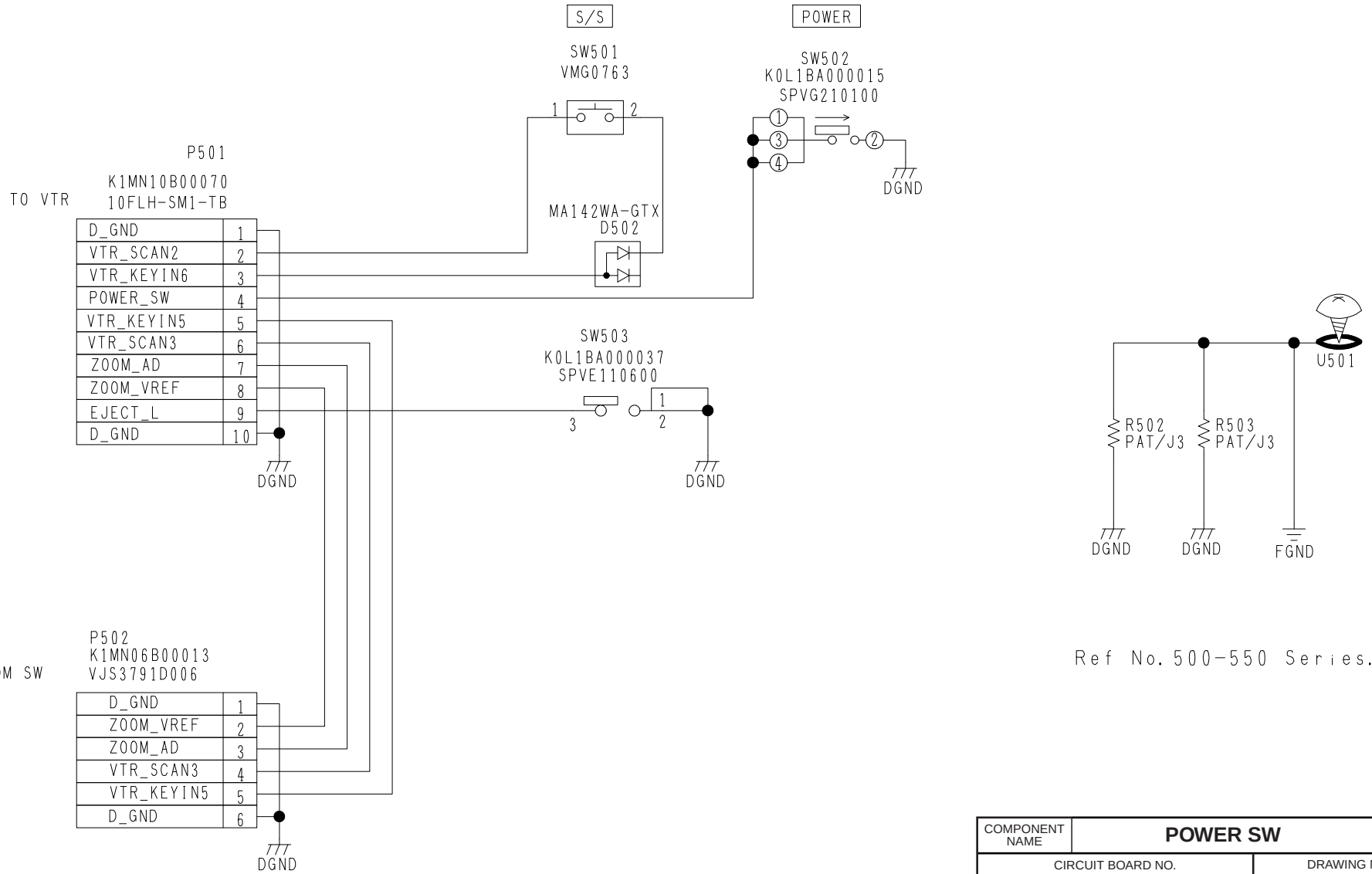
COMPONENT NAME	**CAMERA OP2**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP06E93A		KR6V44 (1/1) (0)
		SCM023



COMPONENT NAME	HANDLE 1	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06E95A		KR6V46 (1/2) (0)
		SCM025

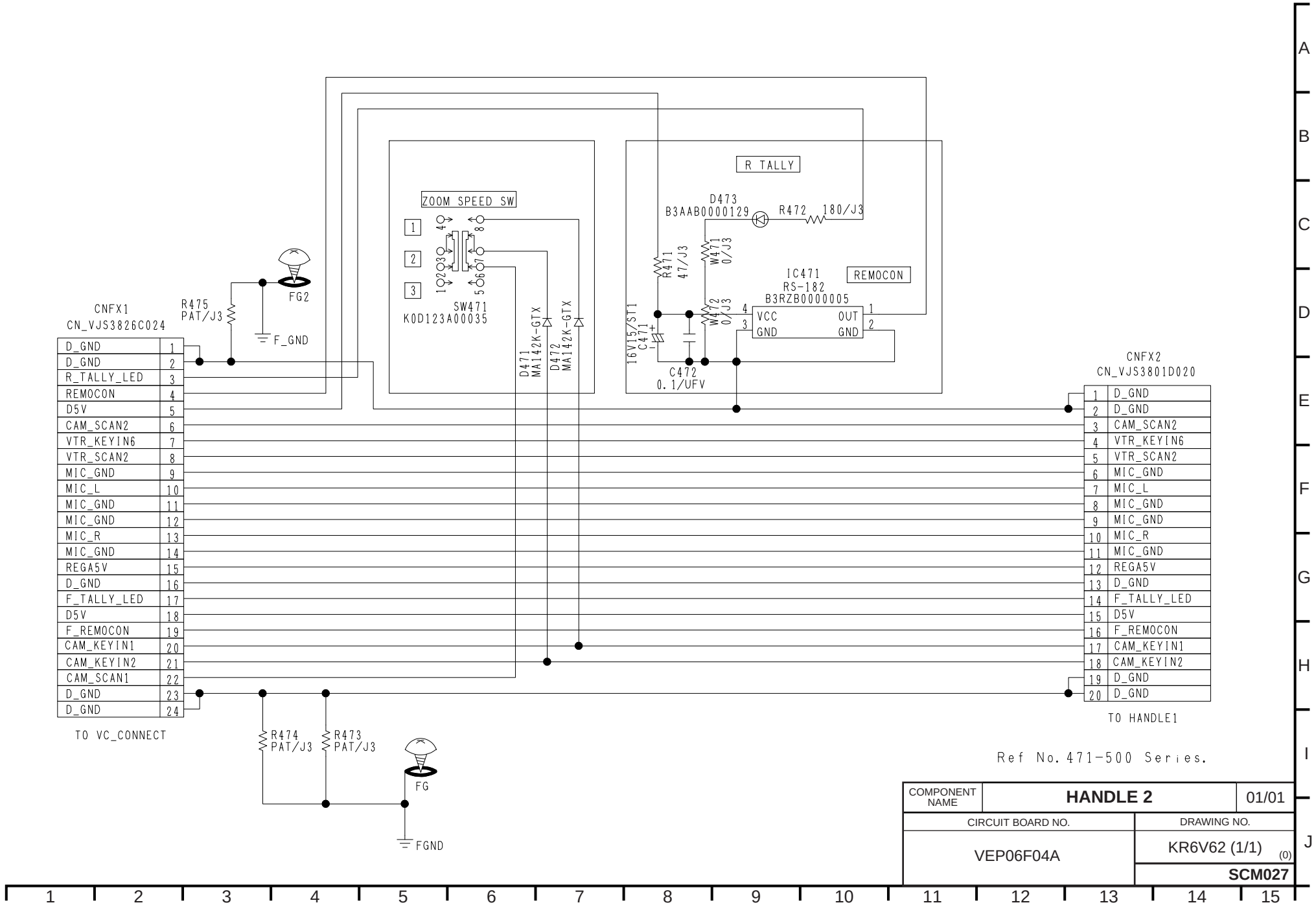


COMPONENT NAME	HANDLE 1	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06E95A		KR6V46 (2/2) (0)
		SCM026



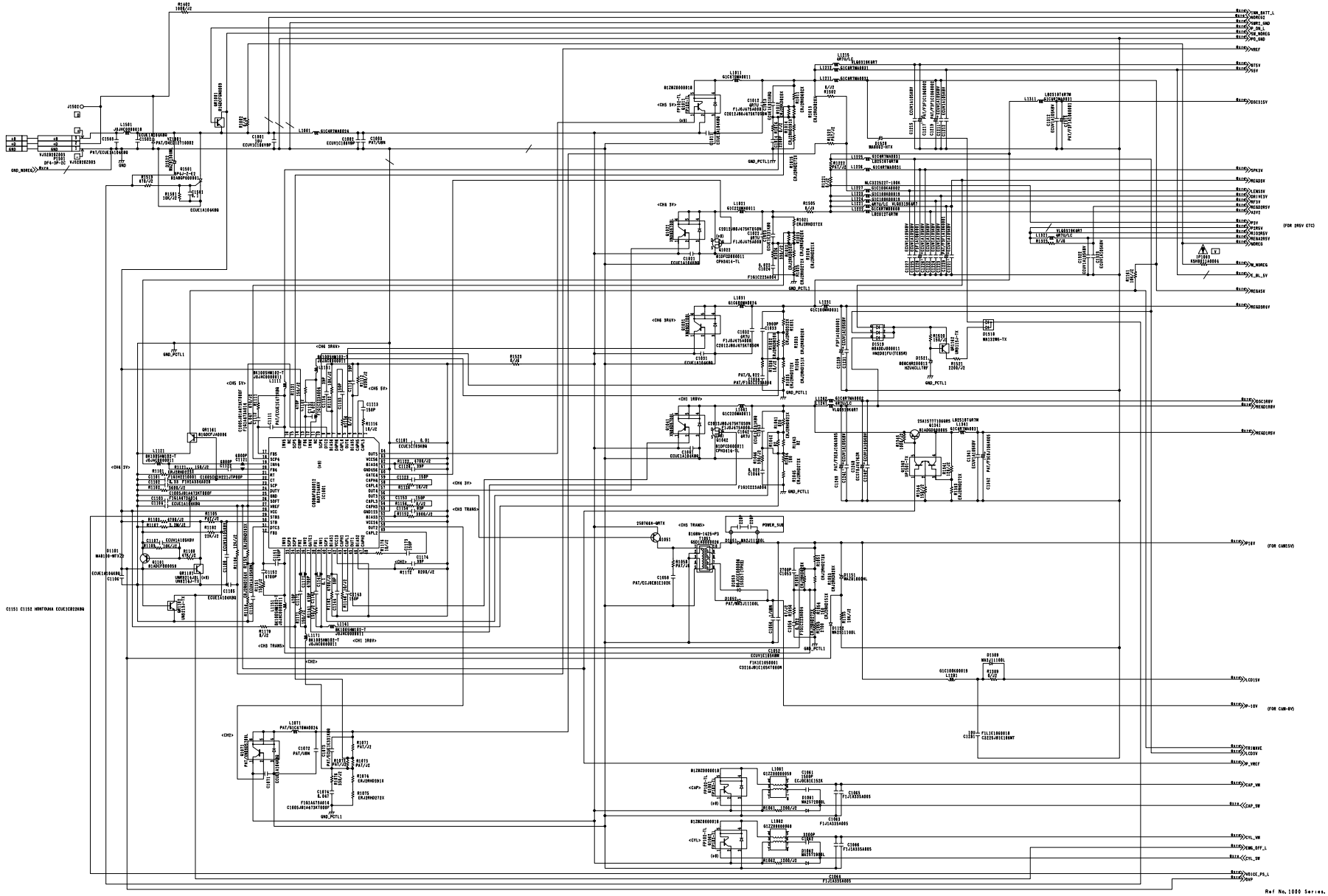
Ref No. 500-550 Series.

COMPONENT NAME	**POWER SW**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP06E96A	KR6V47 (1/1) (0)	
	SCM033	



Ref No. 471-500 Series.

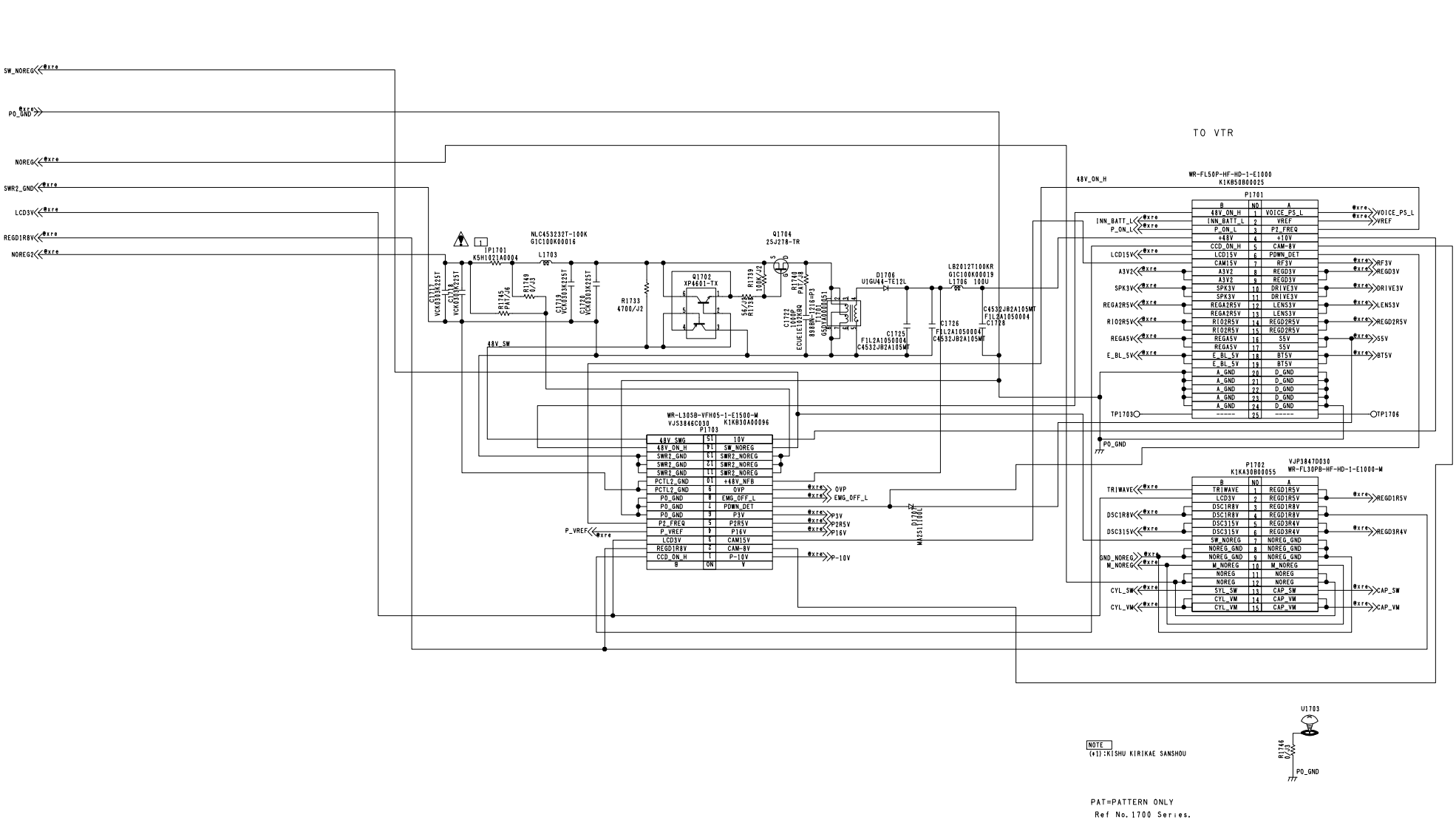
COMPONENT NAME	HANDLE 2	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP06F04A		KR6V62 (1/1) (0)
		SCM027



COMPONENT NAME	POWER	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP01914A		KR1F82 (1/2) (0)
		SCM015

A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

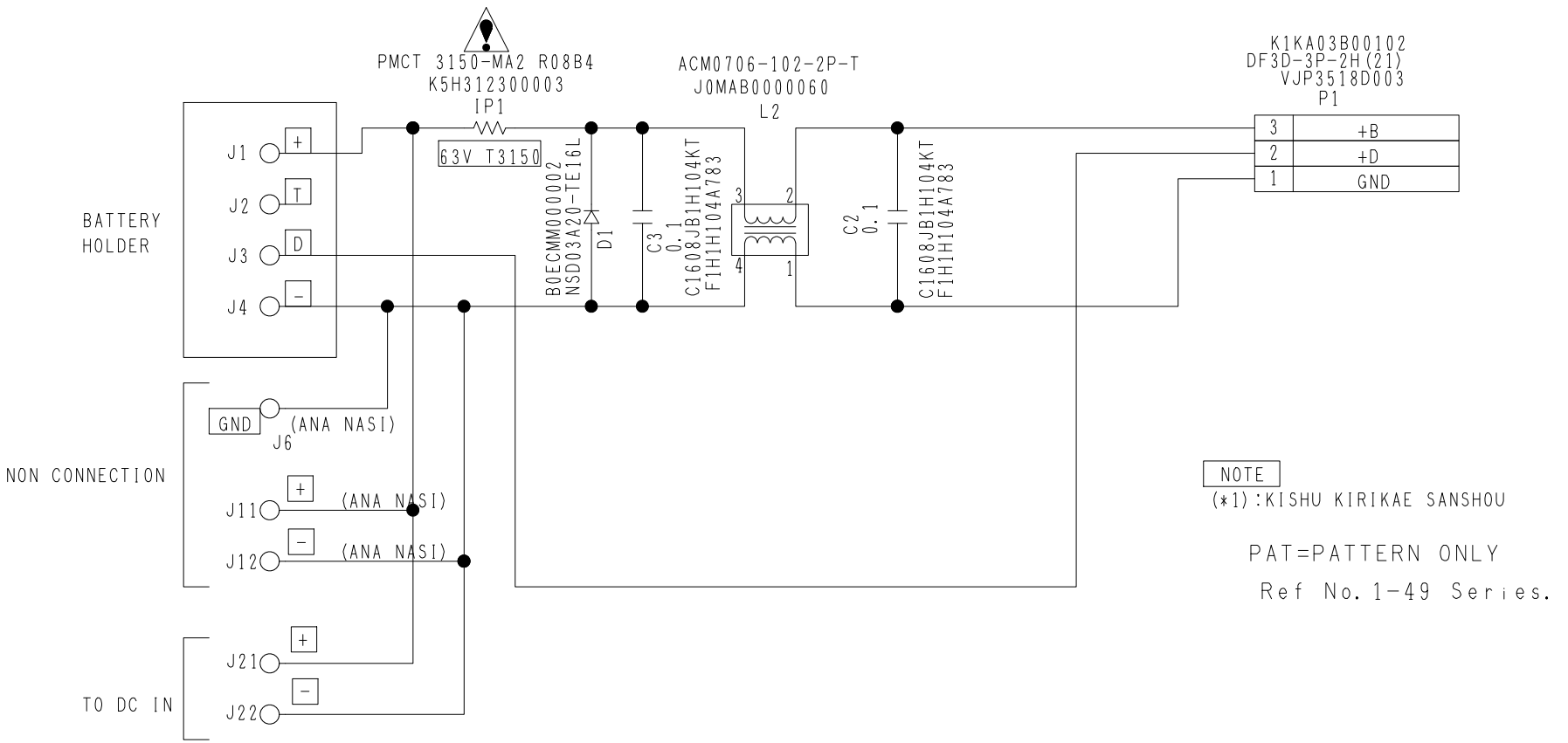


⚠ 警 告

⚠ 印の部品は安全上重要な部品です。
交換するときは、安全上および性能維持のため
必ず指定の部品をご使用ください。

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

COMPONENT NAME	POWER	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP01914A		KR1F82 (2/2) (0)
		SCM016



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

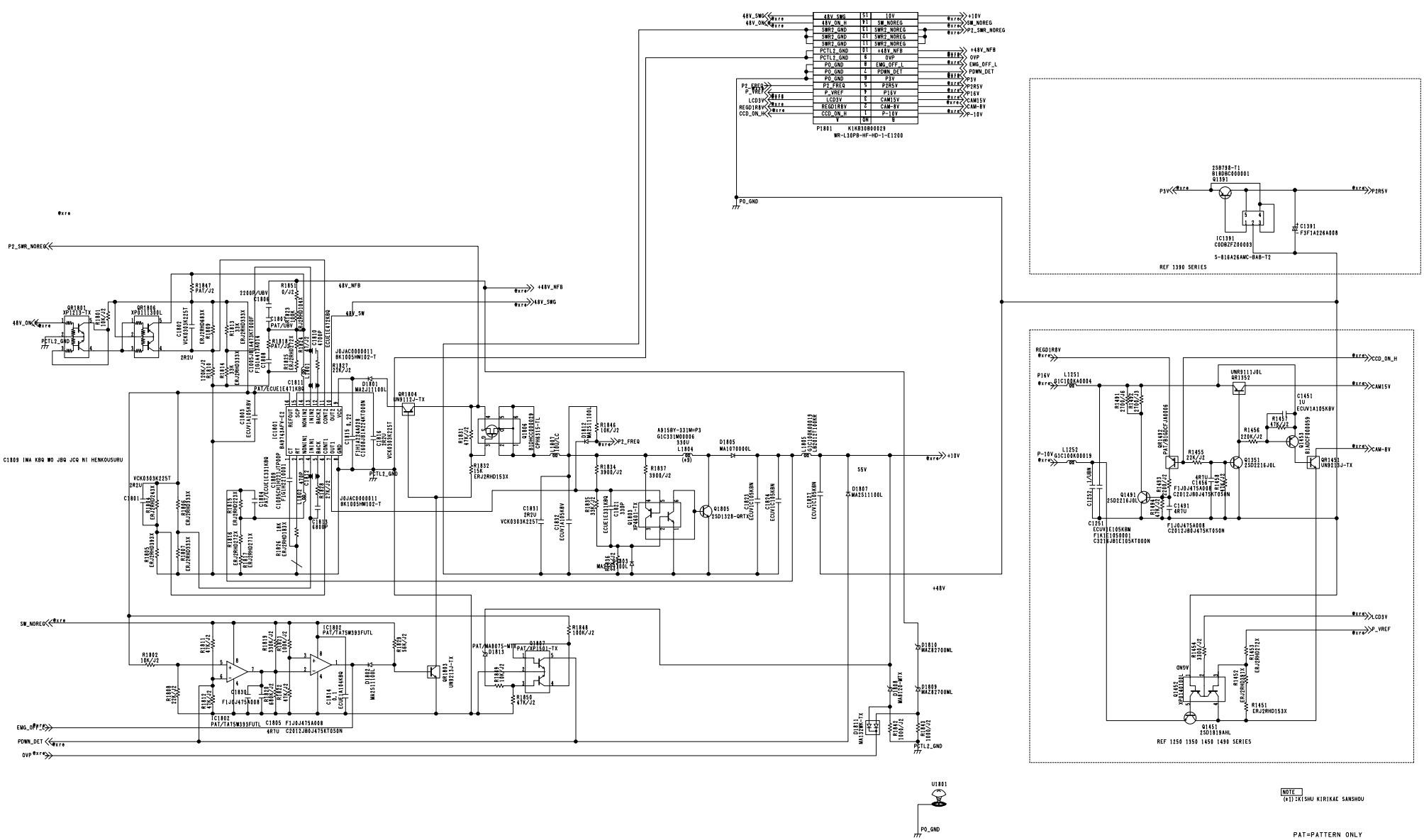
⚠ 警 告

⚠ 印の部品は安全上重要な部品です。
交換するときは、安全上および性能維持のため
必ず指定の部品をご使用ください。

COMPONENT NAME	BATTERY	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP01915A		KR1F83 (1/1) (0)
		SCM042

A B C D E F G H I J

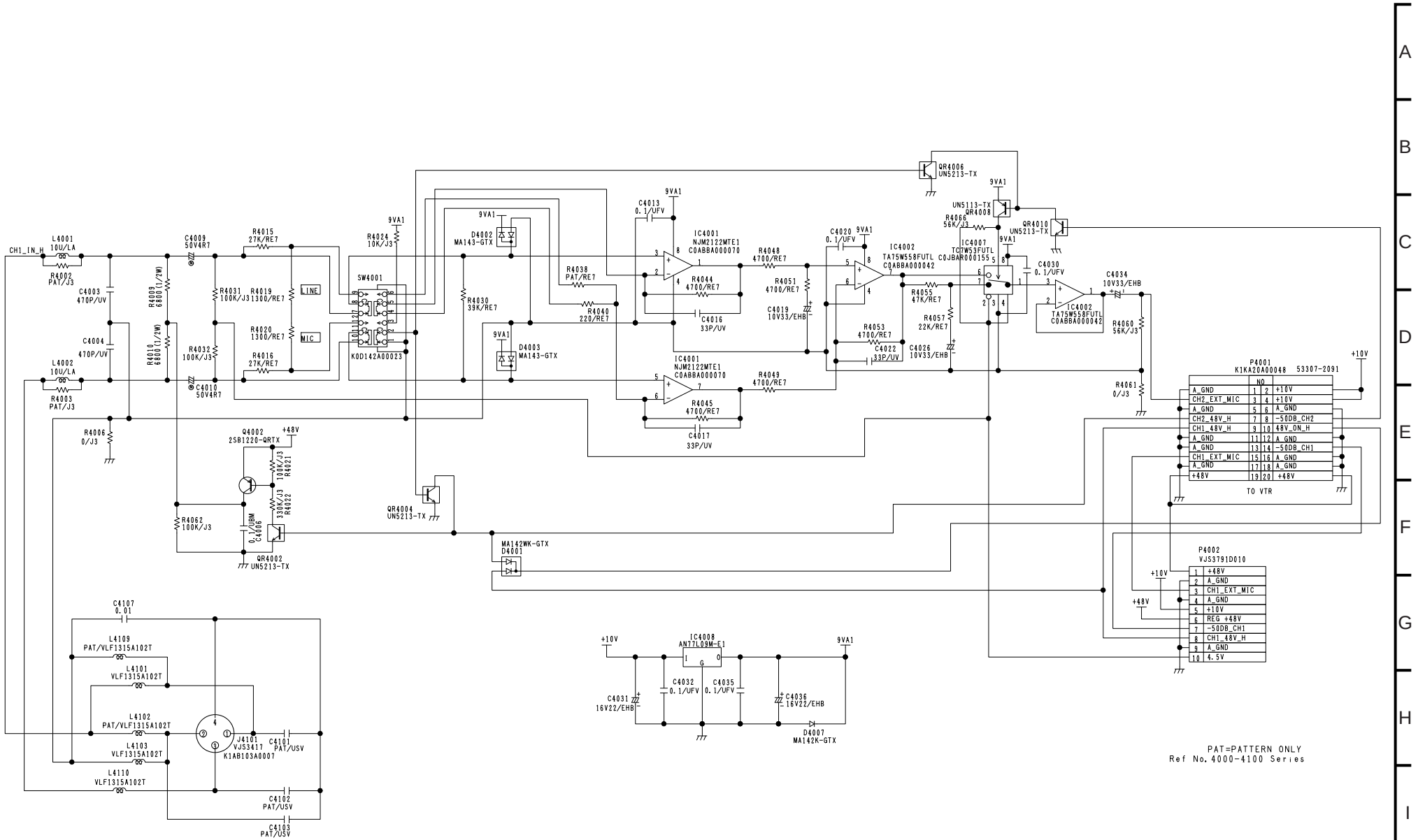
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



COMPONENT NAME	**POWER 2**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP01922A		KR1F94 (1/1) (0)
		SCM017

A B C D E F G H I J

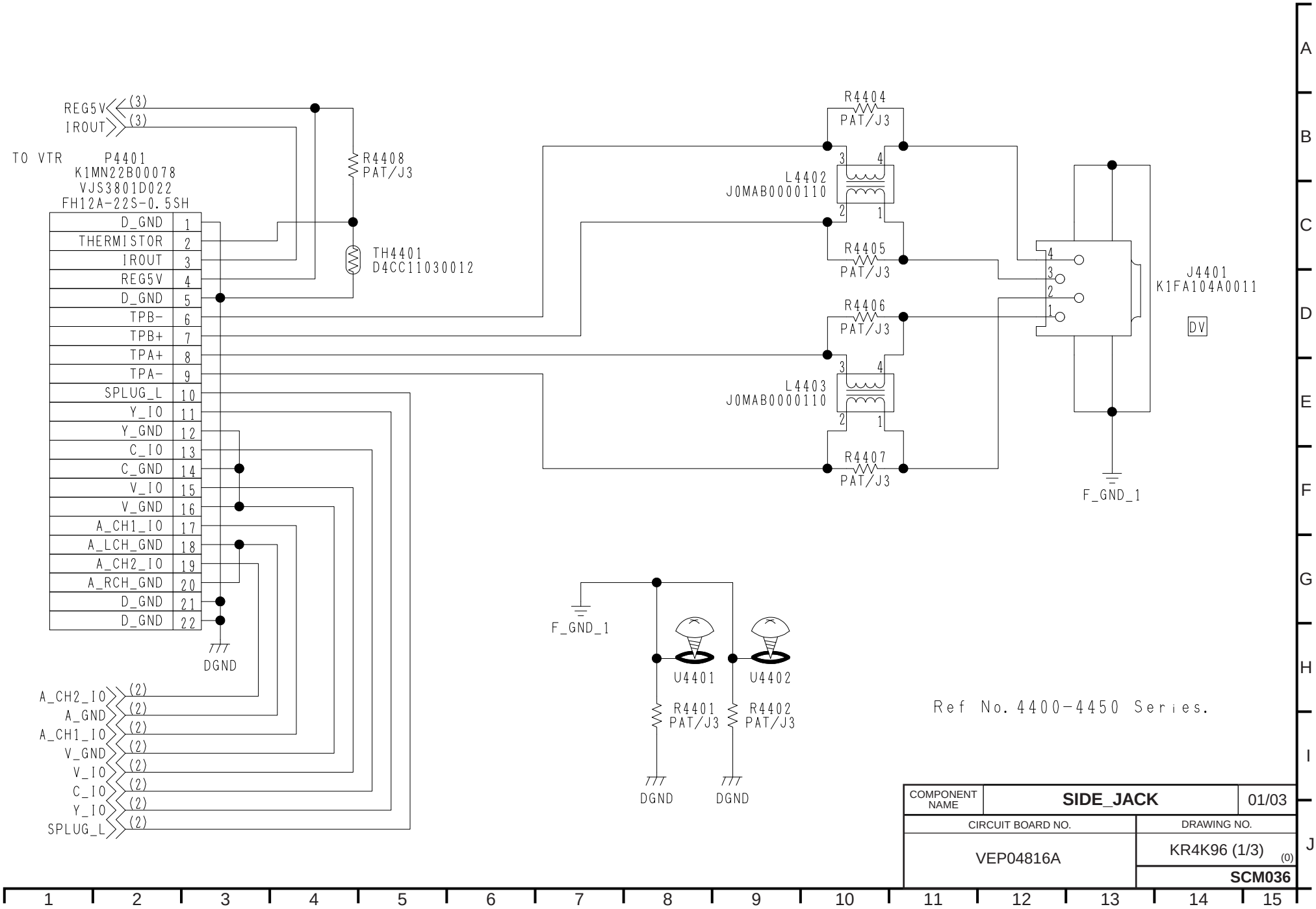
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

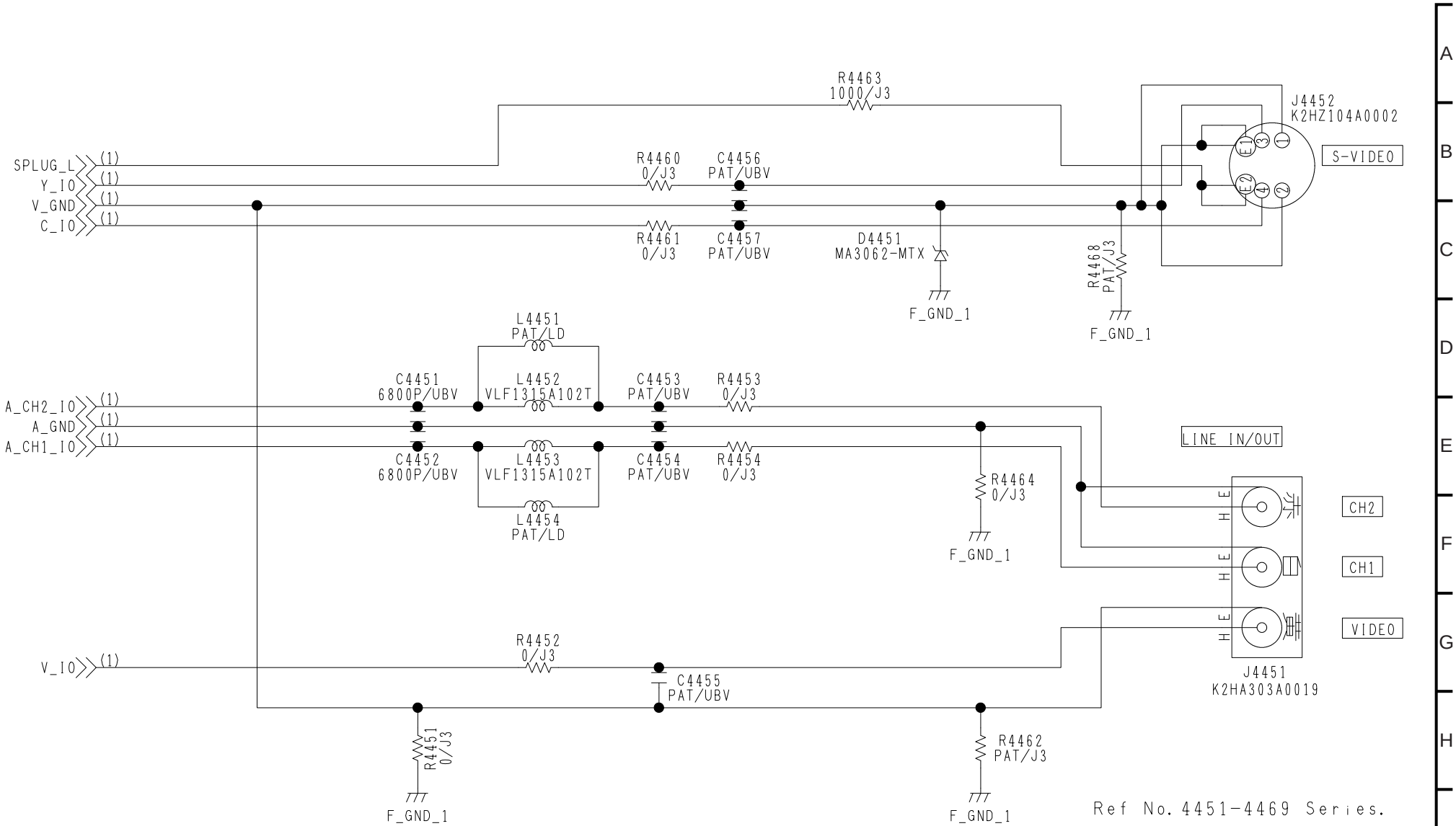


COMPONENT NAME	**MIC CH2**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP04815A		KR4K95 (1/1) (0)
		SCM039

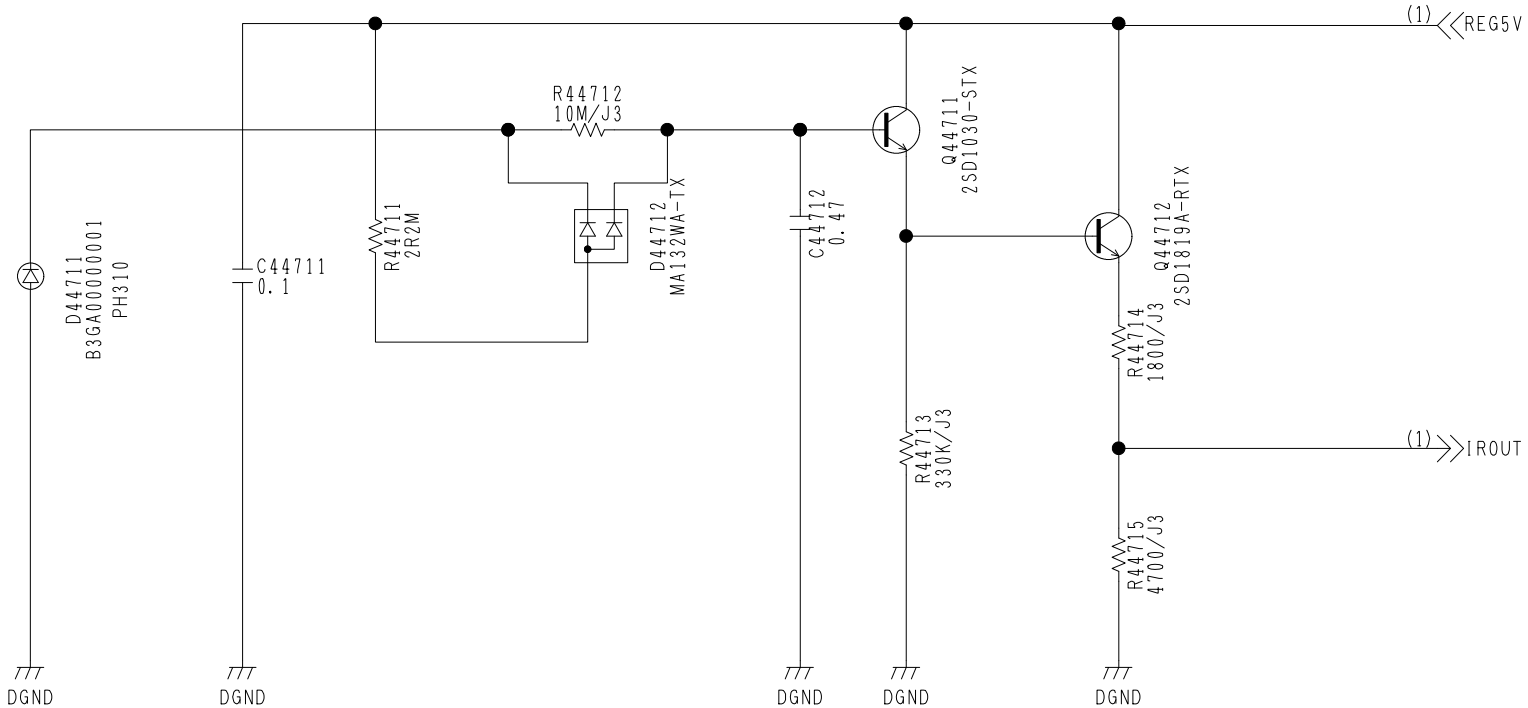
A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15


REG5V (3)
IROUT (3)
TO VTR
P4401
K1MN22B00078
VJS3801D022
FH12A-22S-0.5SH
D_GND 1
THERMISTOR 2
IROUT 3
REG5V 4
D_GND 5
TPB- 6
TPB+ 7
TPA+ 8
TPA- 9
SPLUG_L 10
Y_IO 11
Y_GND 12
C_IO 13
C_GND 14
V_IO 15
V_GND 16
A_CH1_IO 17
A_LCH_GND 18
A_CH2_IO 19
A_RCH_GND 20
D_GND 21
D_GND 22
DGND
R4408
PAT/J3
TH4401
D4CC11030012
R4404
PAT/J3
L4402
J0MAB0000110
R4405
PAT/J3
R4406
PAT/J3
L4403
J0MAB0000110
R4407
PAT/J3
J4401
K1FA104A0011
DV
F_GND_1
A_CH2_IO (2)
A_GND (2)
A_CH1_IO (2)
V_GND (2)
V_IO (2)
C_IO (2)
Y_IO (2)
SPLUG_L (2)
F_GND_1
U4401
U4402
R4401
PAT/J3
R4402
PAT/J3
DGND
DGND
Ref No. 4400-4450 Series.
COMPONENT NAME
SIDE_JACK
01/03
CIRCUIT BOARD NO.
VEP04816A
DRAWING NO.
KR4K96 (1/3) (0)
SCM036



COMPONENT NAME	SIDE_JACK	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04816A		KR4K96 (2/3) (0)
		SCM037

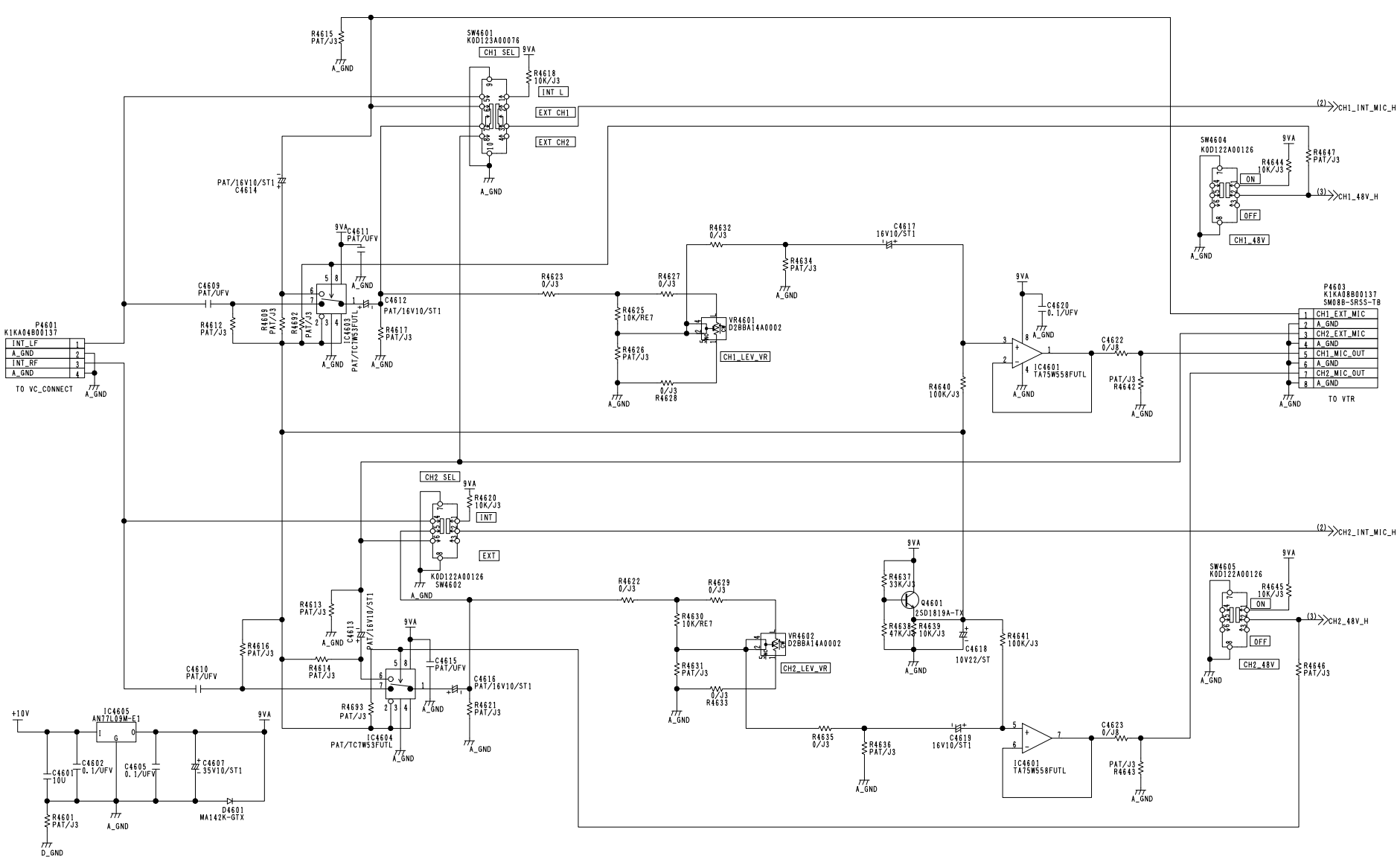


Ref No. 4470-4500 Series

COMPONENT NAME	**SIDE_JACK**	03/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04816A		KR4K96 (3/3) (0)
		SCM038

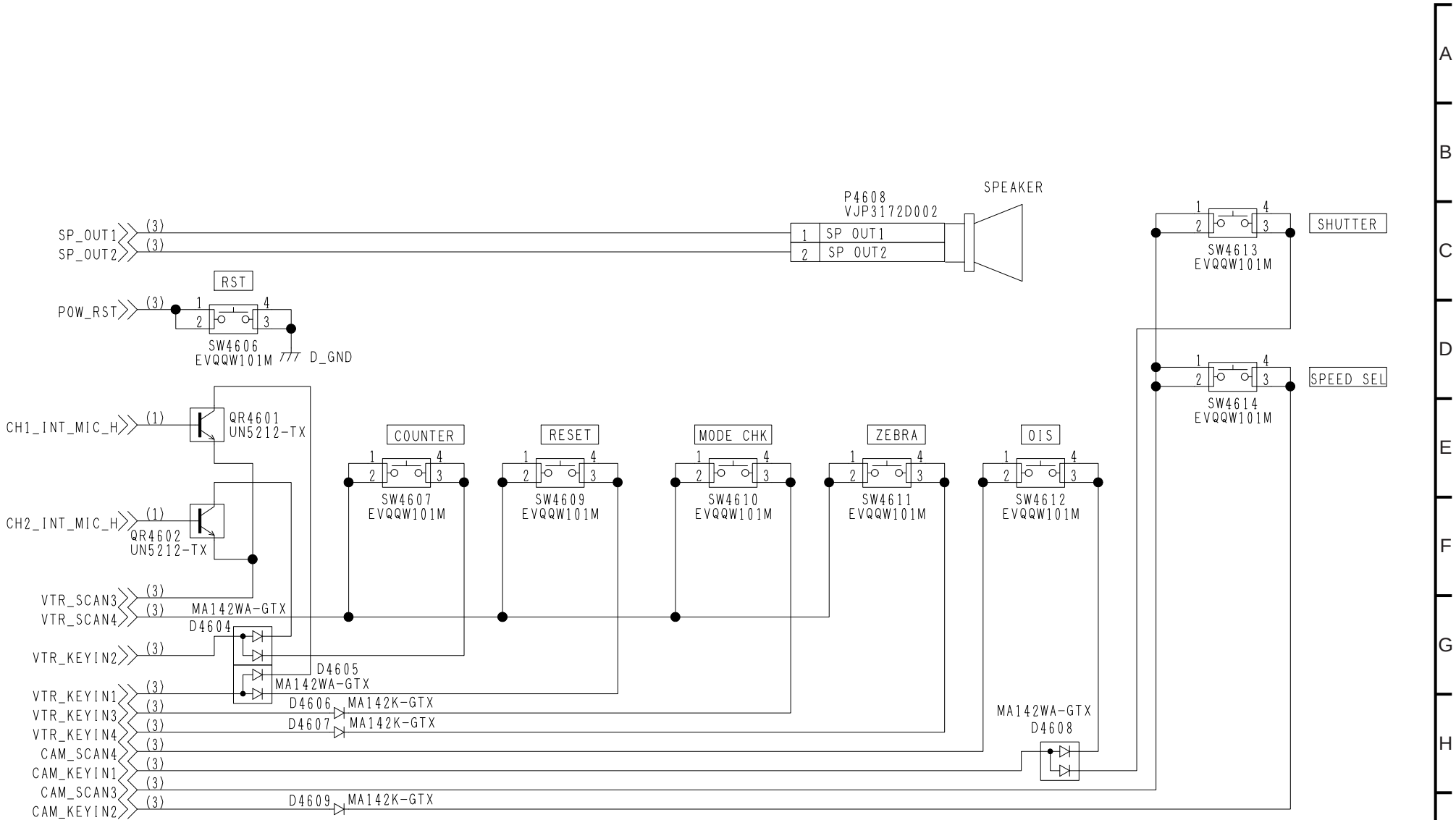
A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



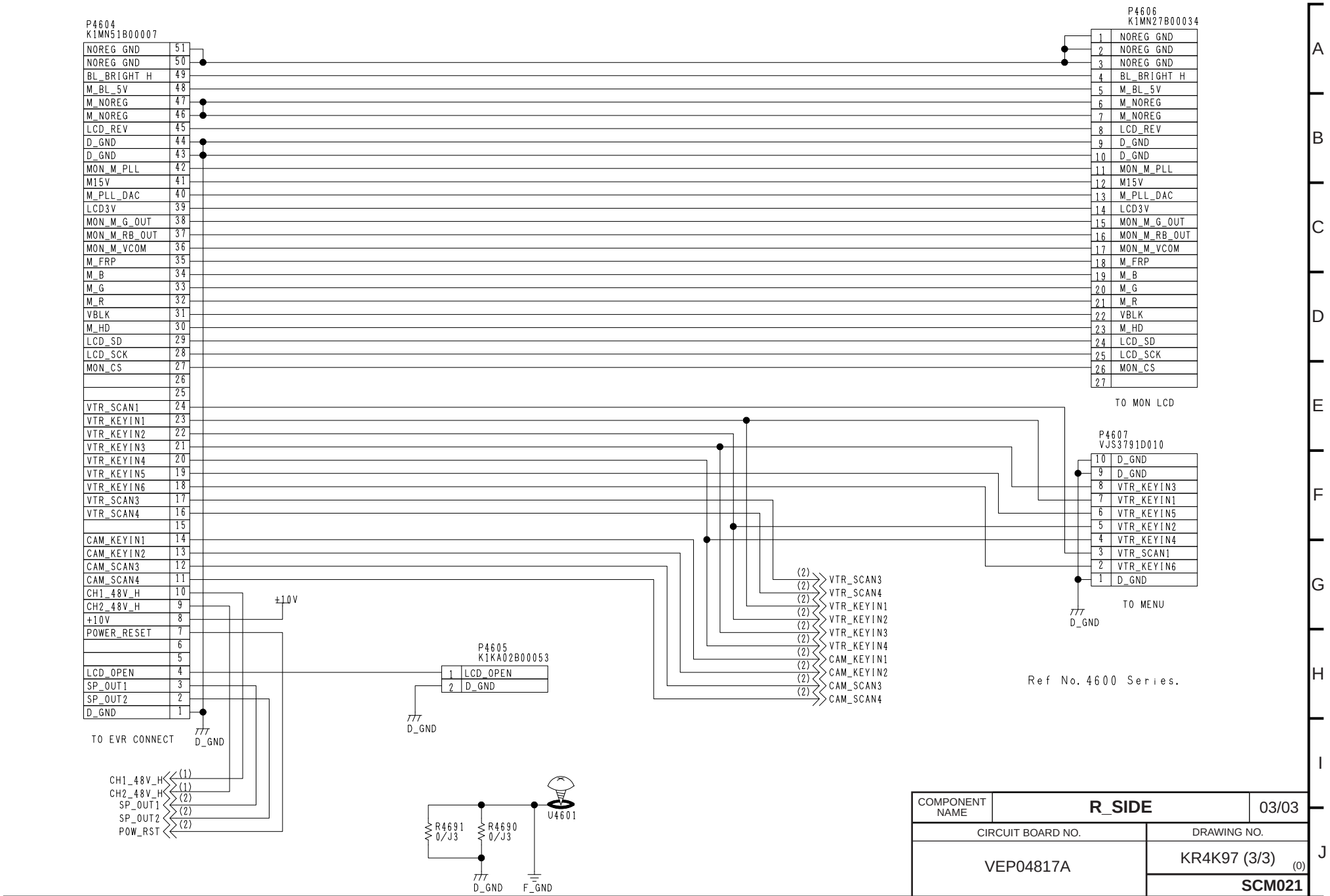
Ref No. 4600 Series.

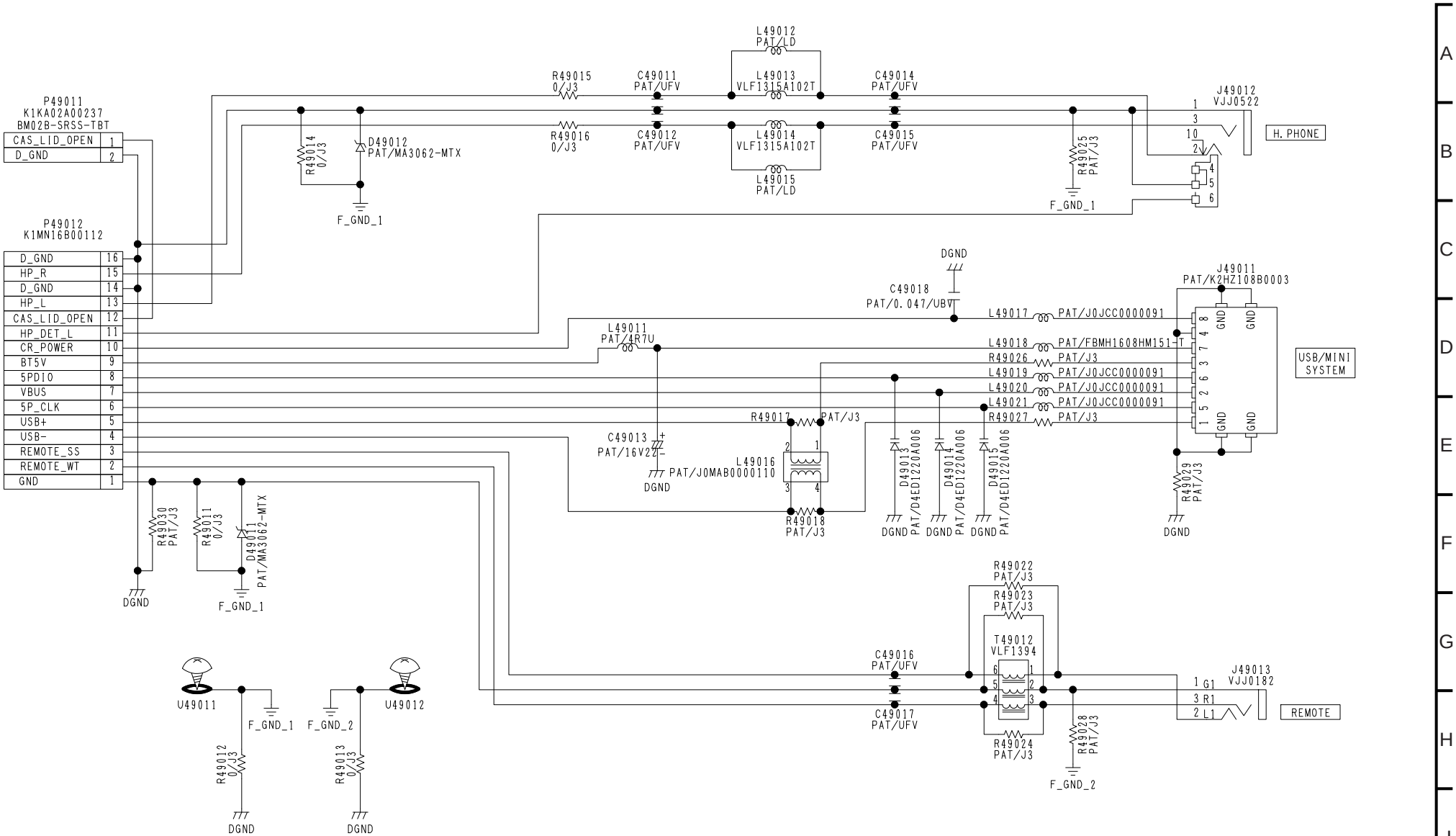
COMPONENT NAME	R_SIDE	01/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04817A		KR4K97 (1/3) (0)
		SCM019



Ref No. 4600 Series.

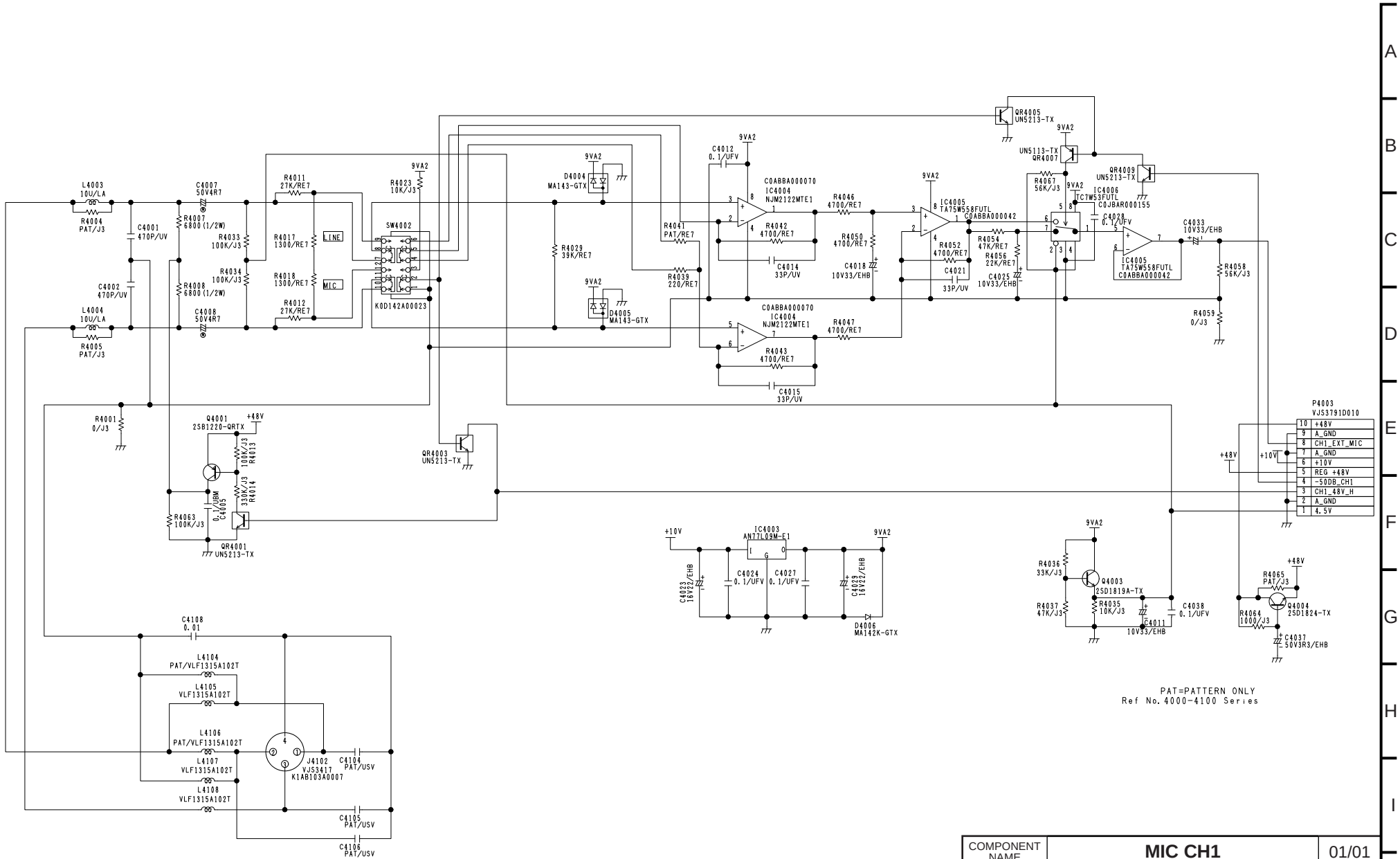
COMPONENT NAME	R_SIDE	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04817A		KR4K97 (2/3) (0)
		SCM020


P4604
K1MN51B00007
NOREG GND 51
NOREG GND 50
BL_BRIGHT H 49
M_BL_5V 48
M_NOREG 47
M_NOREG 46
LCD_REV 45
D_GND 44
D_GND 43
MON_M_PLL 42
M15V 41
M_PLL_DAC 40
LCD3V 39
MON_M_G_OUT 38
MON_M_RB_OUT 37
MON_M_VCOM 36
M_FRP 35
M_B 34
M_G 33
M_R 32
VBLK 31
M_HD 30
LCD_SD 29
LCD_SCK 28
MON_CS 27
26
25
VTR_SCAN1 24
VTR_KEYIN1 23
VTR_KEYIN2 22
VTR_KEYIN3 21
VTR_KEYIN4 20
VTR_KEYIN5 19
VTR_KEYIN6 18
VTR_SCAN3 17
VTR_SCAN4 16
15
CAM_KEYIN1 14
CAM_KEYIN2 13
CAM_SCAN3 12
CAM_SCAN4 11
CH1_48V_H 10
CH2_48V_H 9
+10V 8
POWER_RESET 7
6
5
LCD_OPEN 4
SP_OUT1 3
SP_OUT2 2
D_GND 1
TO EVR CONNECT
D_GND
+10V
CH1_48V_H (1)
CH2_48V_H (1)
SP_OUT1 (2)
SP_OUT2 (2)
POW_RST (2)
P4605
K1KA02B00053
1 LCD_OPEN
2 D_GND
D_GND
R4691 0/J3
R4690 0/J3
U4601
D_GND
F_GND
P4606
K1MN27B00034
1 NOREG GND
2 NOREG GND
3 NOREG GND
4 BL_BRIGHT H
5 M_BL_5V
6 M_NOREG
7 M_NOREG
8 LCD_REV
9 D_GND
10 D_GND
11 MON_M_PLL
12 M15V
13 M_PLL_DAC
14 LCD3V
15 MON_M_G_OUT
16 MON_M_RB_OUT
17 MON_M_VCOM
18 M_FRP
19 M_B
20 M_G
21 M_R
22 VBLK
23 M_HD
24 LCD_SD
25 LCD_SCK
26 MON_CS
27
TO MON LCD
P4607
VJS3791D010
10 D_GND
9 D_GND
8 VTR_KEYIN3
7 VTR_KEYIN1
6 VTR_KEYIN5
5 VTR_KEYIN2
4 VTR_KEYIN4
3 VTR_SCAN1
2 VTR_KEYIN6
1 D_GND
TO MENU
D_GND
(2) VTR_SCAN3
(2) VTR_SCAN4
(2) VTR_KEYIN1
(2) VTR_KEYIN2
(2) VTR_KEYIN3
(2) VTR_KEYIN4
(2) CAM_KEYIN1
(2) CAM_KEYIN2
(2) CAM_SCAN3
(2) CAM_SCAN4
Ref No. 4600 Series.
COMPONENT NAME
R_SIDE
03/03
CIRCUIT BOARD NO.
VEP04817A
DRAWING NO.
KR4K97 (3/3) (0)
SCM021
A
B
C
D
E
F
G
H
I
J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

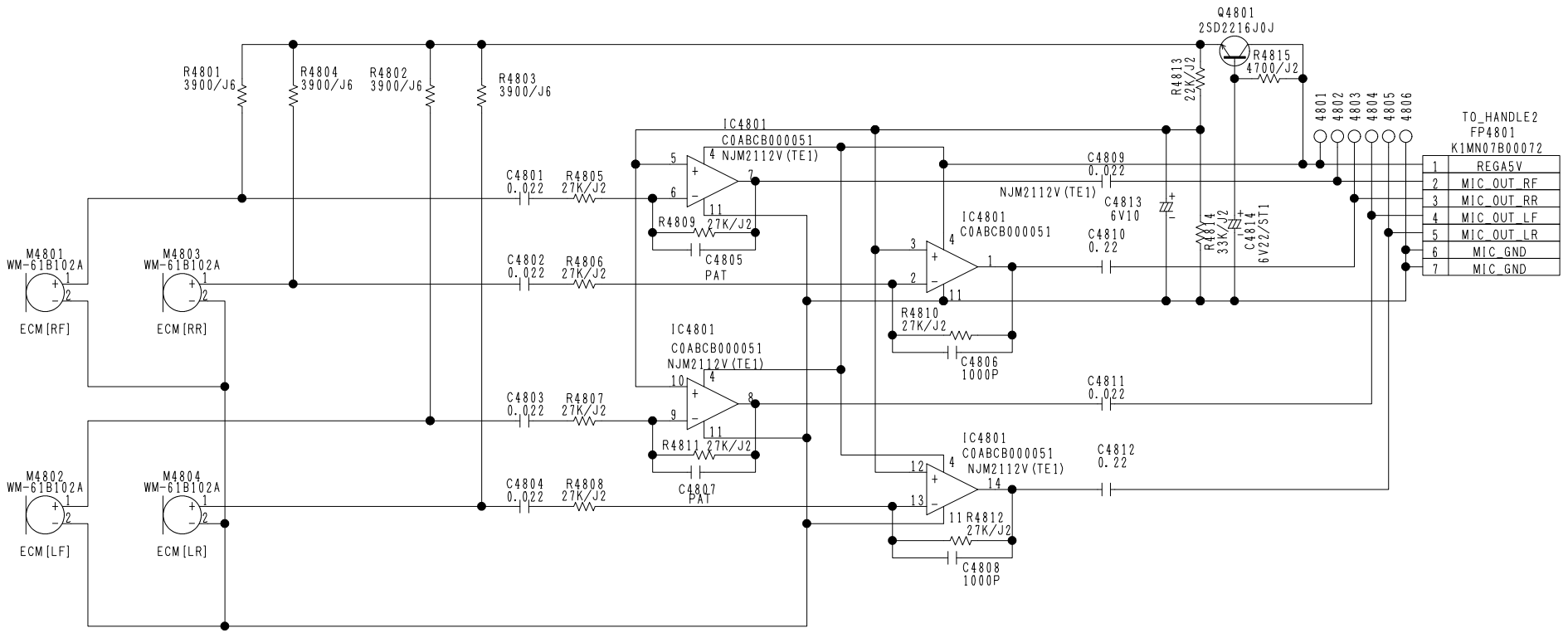


Ref No. 49000 Series.

COMPONENT NAME	REAR JACK	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP04819A	KR4I04 (1/1) (0)	
	SCM032	

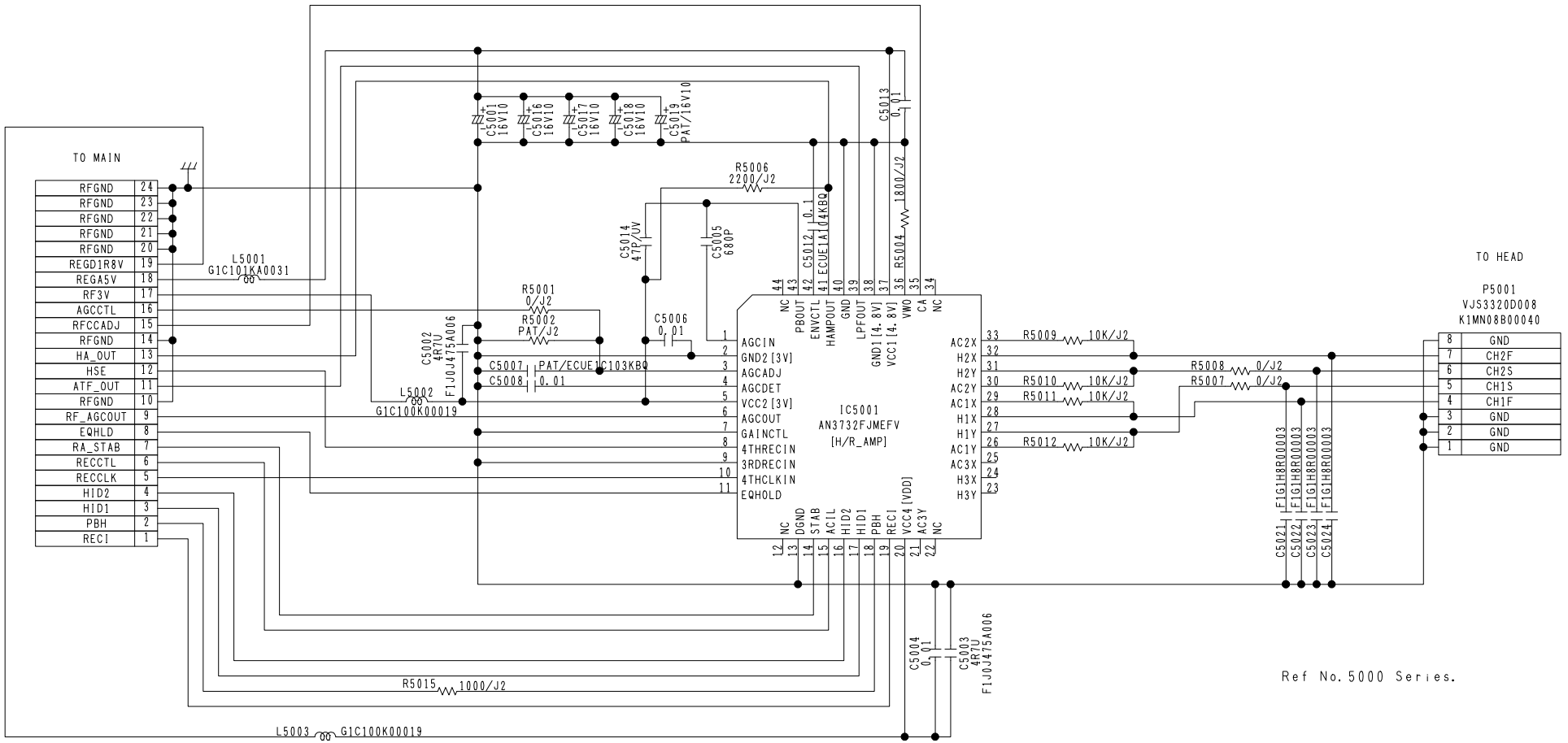


COMPONENT NAME	**MIC CH1**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP04825A	KR4L25 (1/1) (0)	
	SCM040	

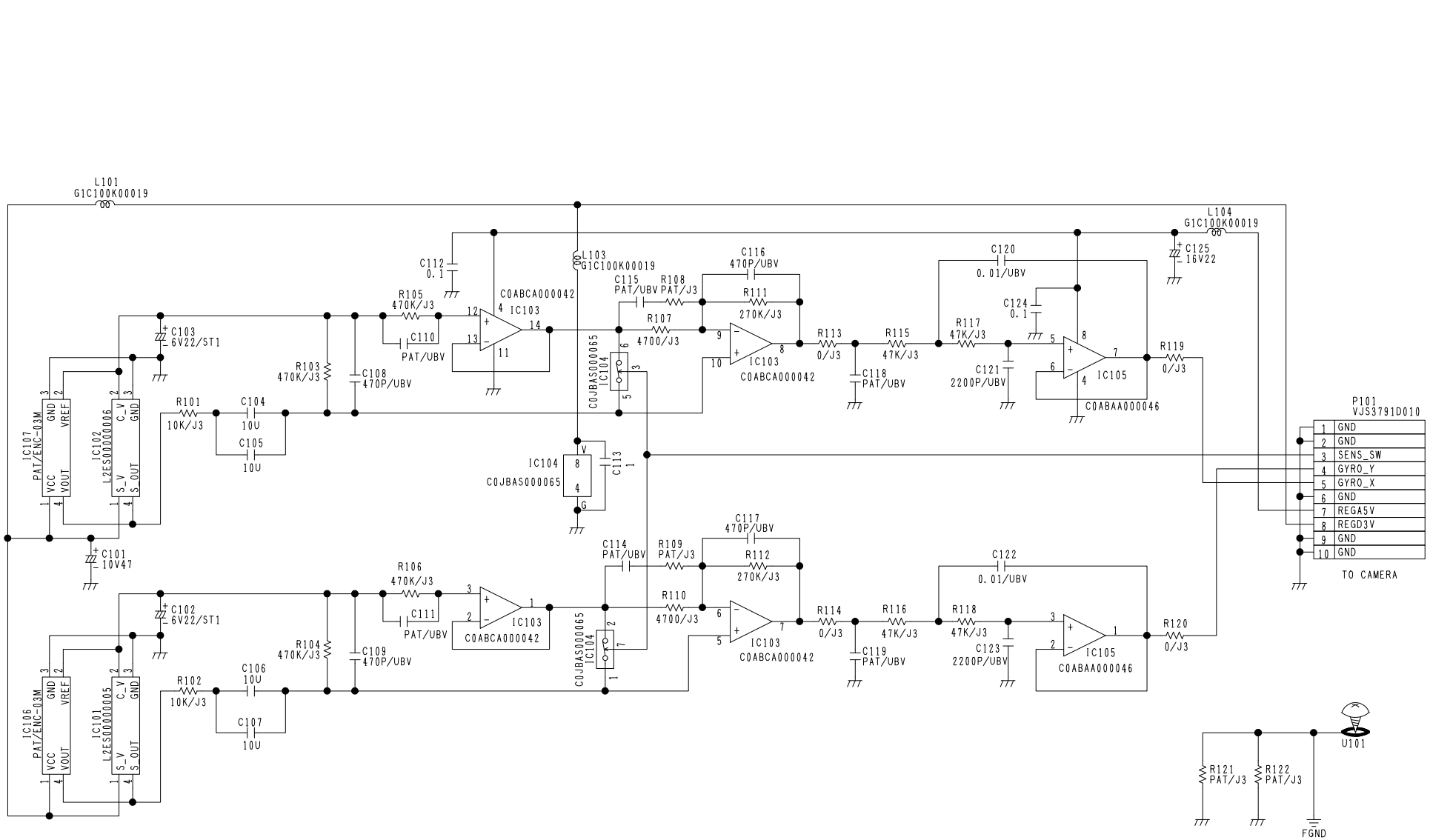


Ref No. 4800 Series.

COMPONENT NAME	**MIC**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP04828A	KR4L33 (1/1) (0)	
	SCM028	

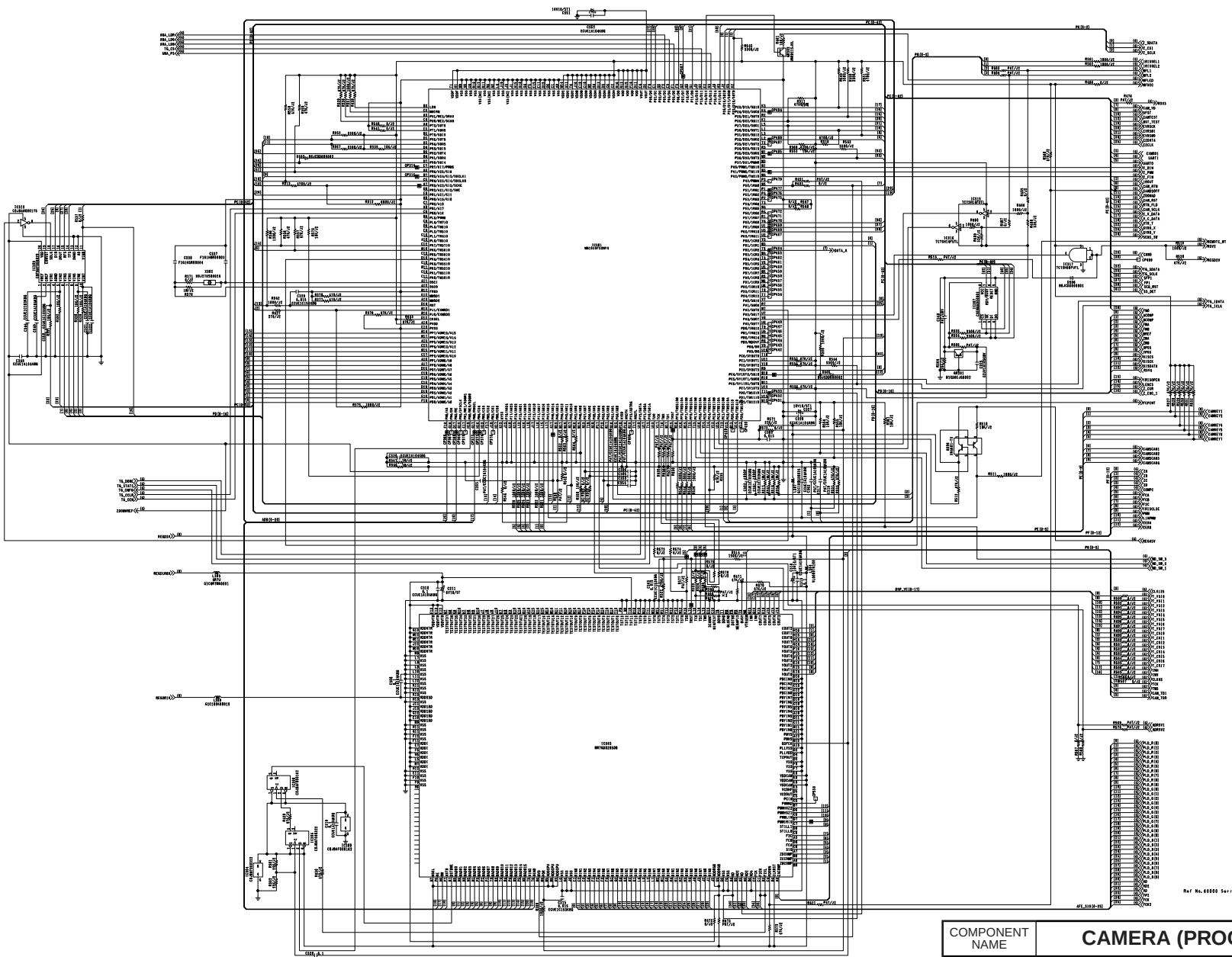


COMPONENT NAME	HR_AMP	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP05395A		KR5610 (1/1) (0)
		SCM018

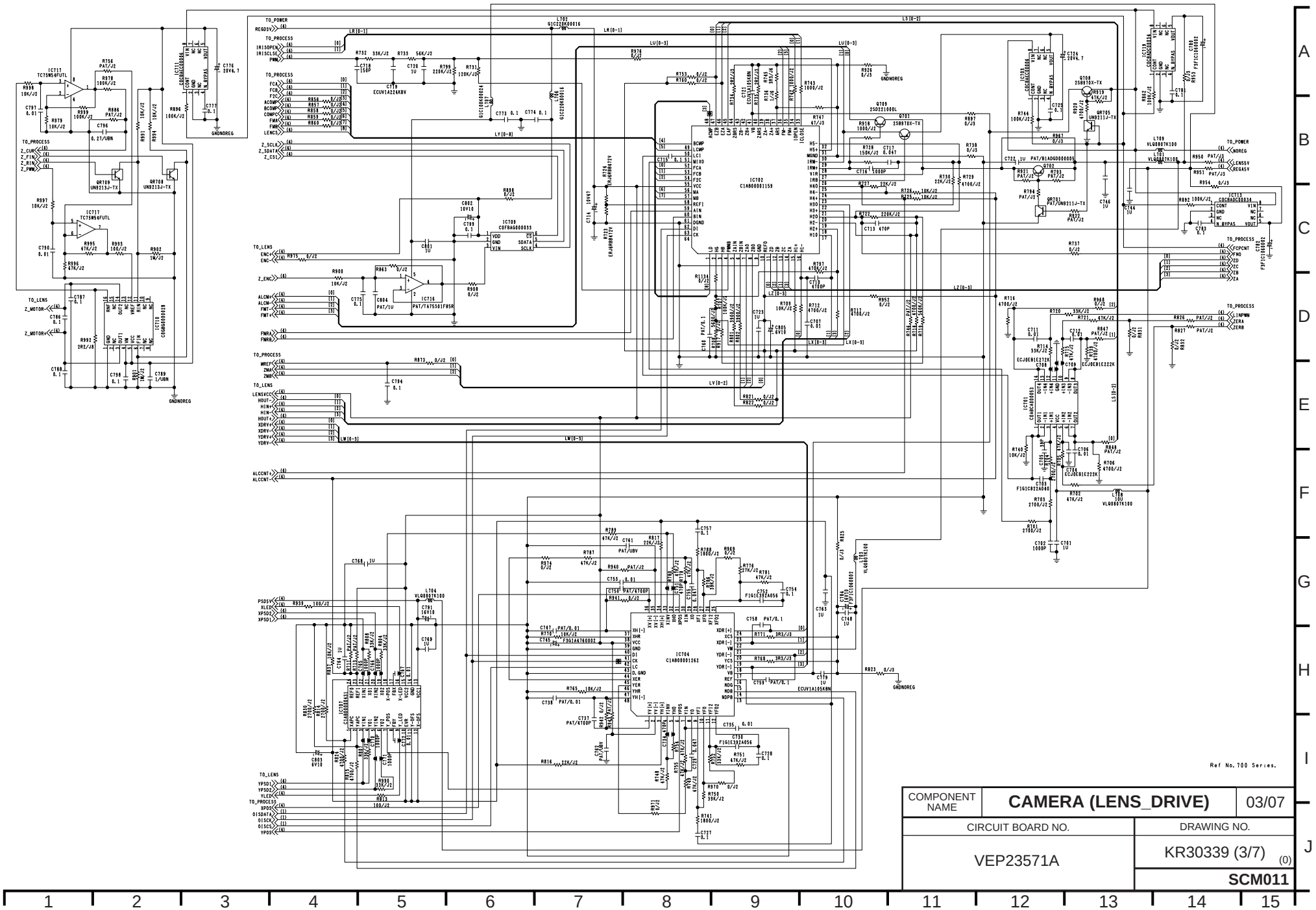


Ref No. 100 Series.

COMPONENT NAME	GYRO	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP22331A		KR2E68 (1/1) (0)
		SCM035

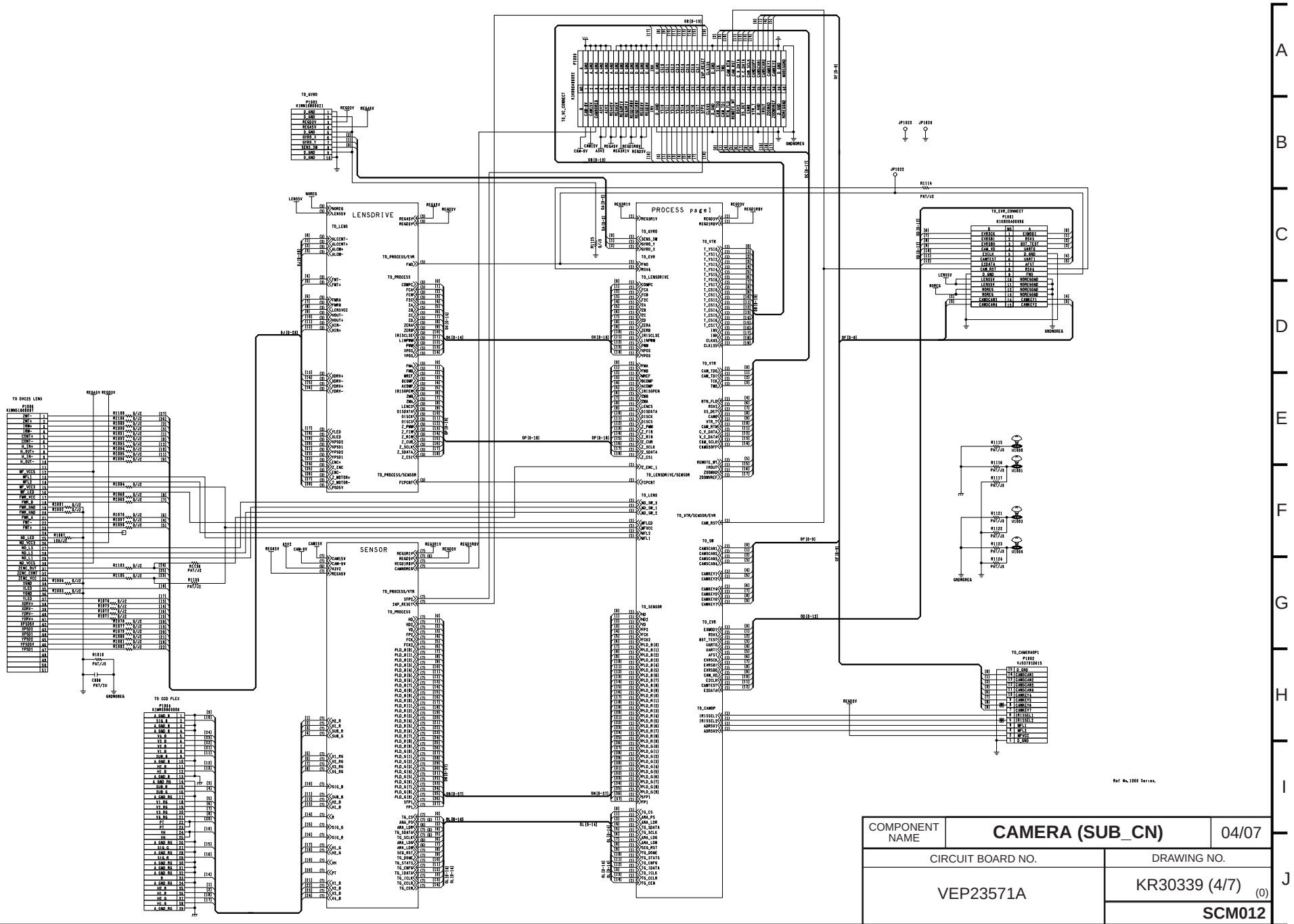


COMPONENT NAME	CAMERA (PROCESS)	01/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP23571A		KR30339 (1/7) (0)
		SCM010

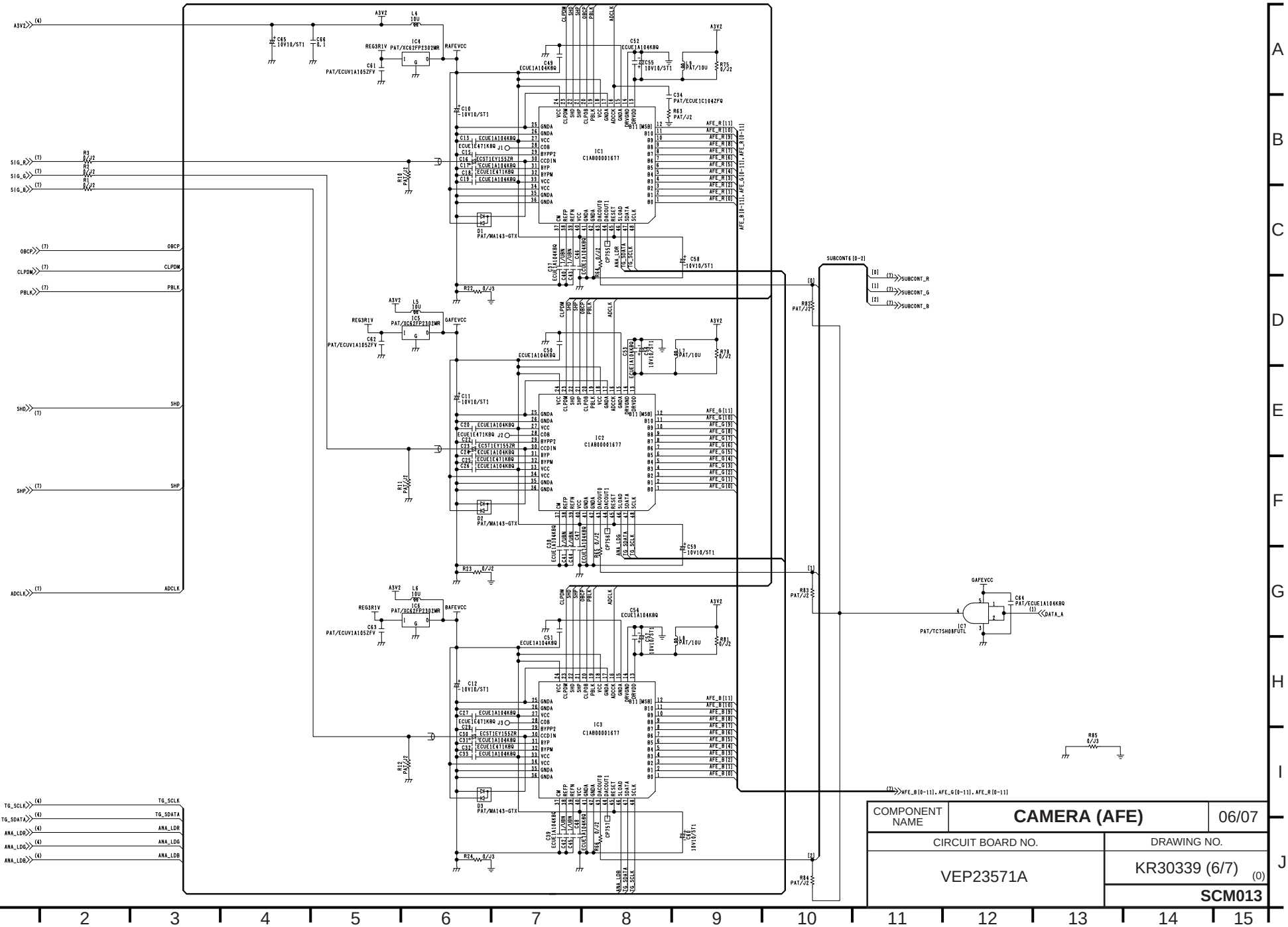


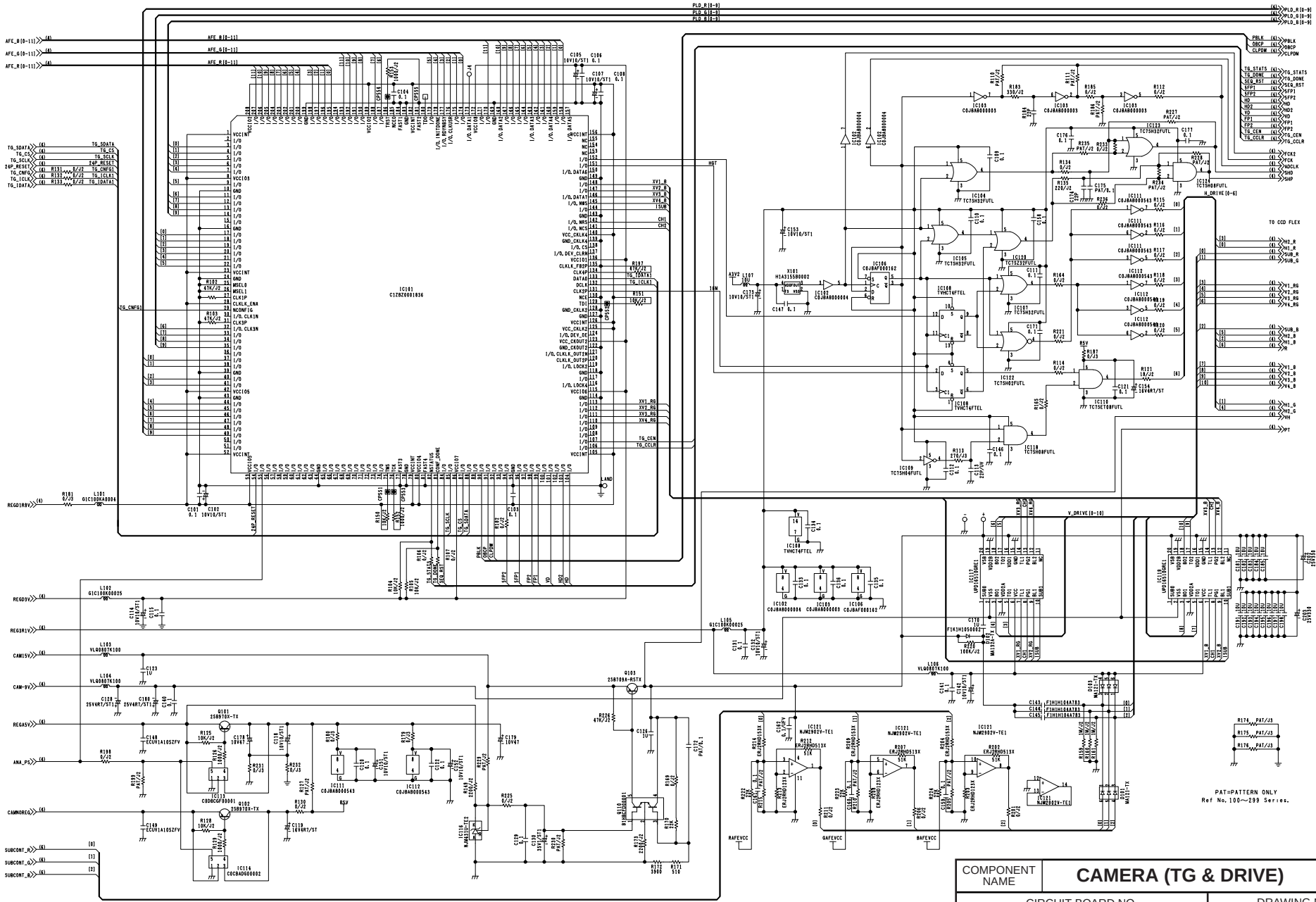
Ref No. 700 Series.

COMPONENT NAME	**CAMERA (LENS_DRIVE)**	03/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP23571A		KR30339 (3/7) (0)
		SCM011

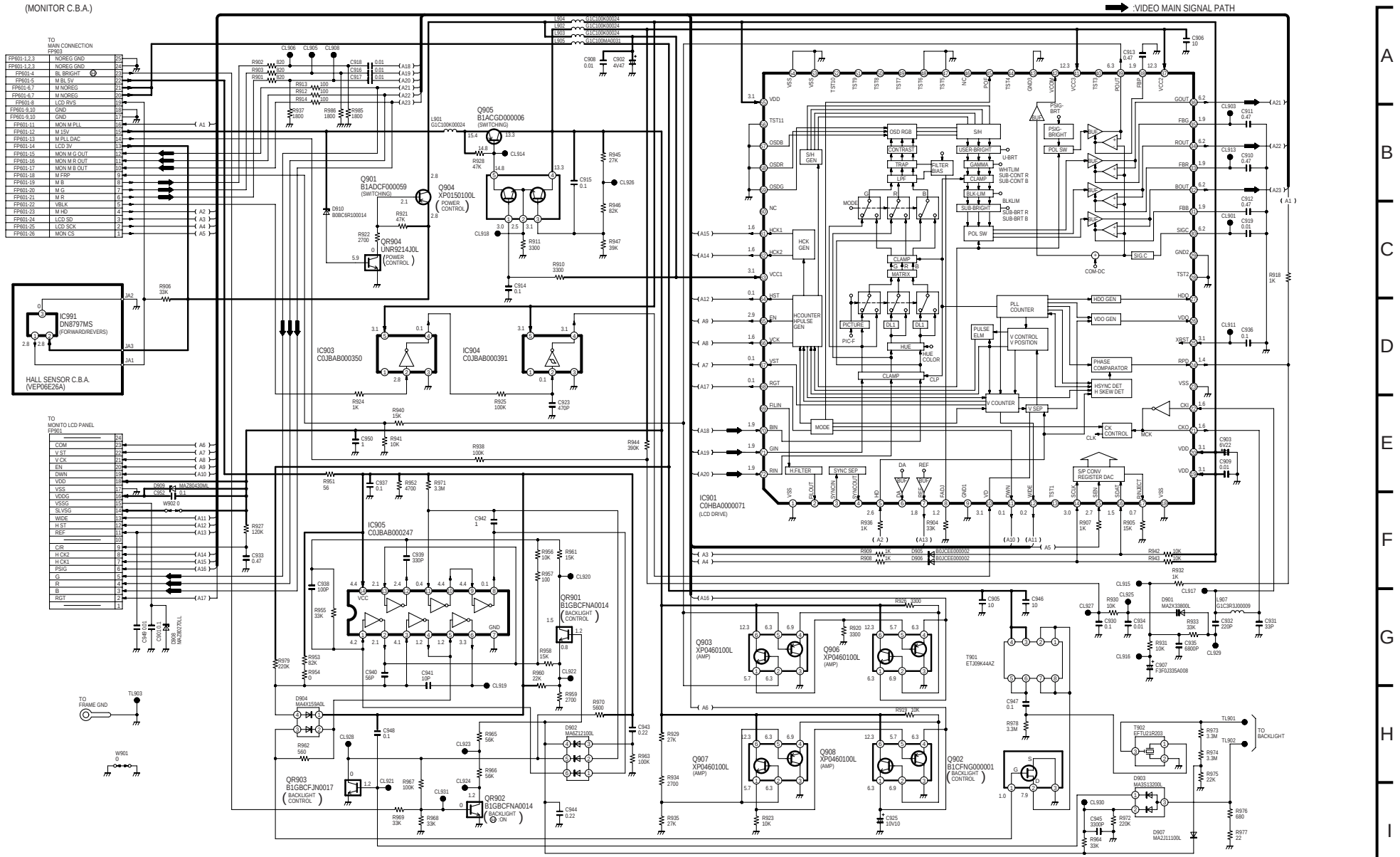


COMPONENT NAME	**CAMERA (SUB_CN)**	04/07
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23571A	KR30339 (4/7) (0)	
	SCM012	

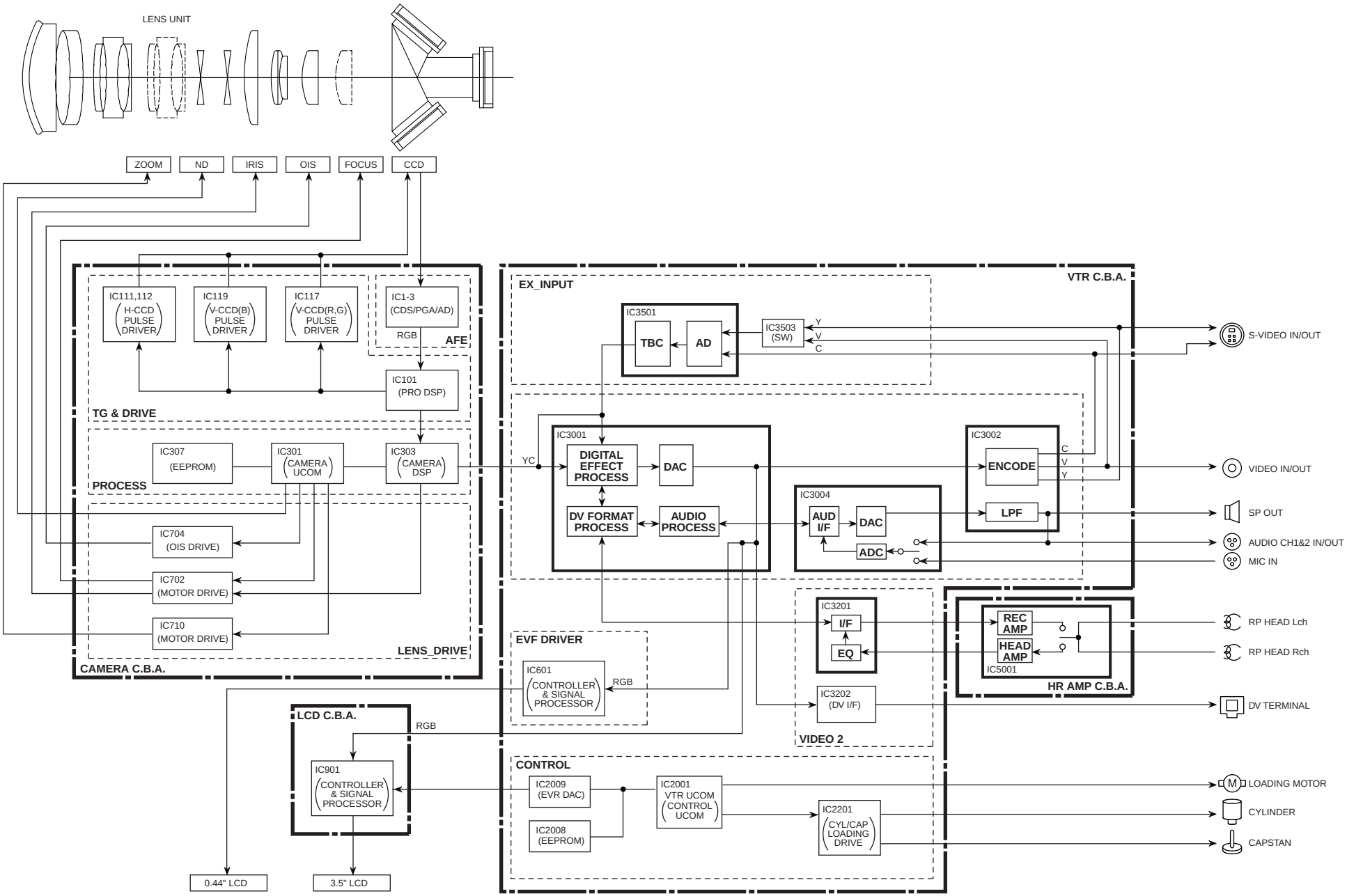

A3V2
SIG_R
SIG_G
SIG_B
OBCP
CLPDM
PBLK
SHD
SHP
ADCLK
TG_SCLK
TG_SDATA
ANA_LDR
ANA_LDG
ANA_LDB
REG3R1V
RAFEVCC
GAFEVCC
BAFEVCC
IC1 C1AB00001677
IC2 C1AB00001677
IC3 C1AB00001677
IC4 PAT/XC62FP2302MR
IC5 PAT/XC62FP2302MR
IC6 PAT/XC62FP2302MR
IC7 PAT/TC7SH08FUTL
D1 PAT/MA143-GTX
D2 PAT/MA143-GTX
D3 PAT/MA143-GTX
SUBCONT&[0-2]
SUBCONT_R
SUBCONT_G
SUBCONT_B
DATA_A
AFE_R[11]
AFE_G[11]
AFE_B[11]
AFE_B[0-11], AFE_G[0-11], AFE_R[0-11]
COMPONENT NAME
CAMERA (AFE)
06/07
CIRCUIT BOARD NO.
VEP23571A
DRAWING NO.
KR30339 (6/7) (0)
SCM013



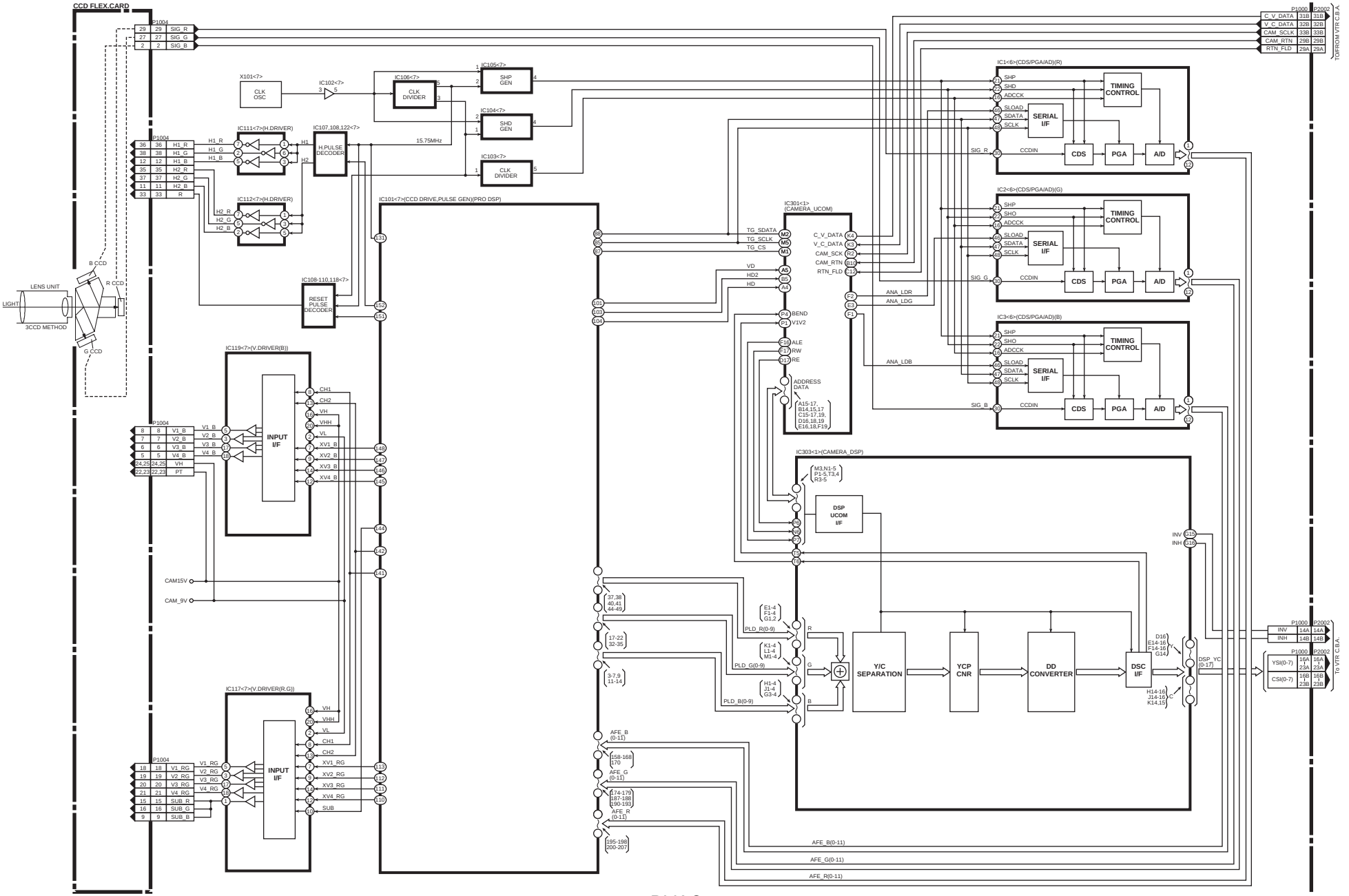
COMPONENT NAME	CAMERA (TG & DRIVE)	07/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP23571A		KR30339 (7/7) (0)
		SCM014


(MONITOR C.B.A.)
:VIDEO MAIN SIGNAL PATH
TO MAIN CONNECTION FP903
FP601-1,2,3 NOREG GND
FP601-1,2,3 NOREG GND
FP601-4 BL BRIGHT
FP601-5 M BL 5V
FP601-6,7 M NOREG
FP601-6,7 M NOREG
FP601-8 LCD RVS
FP601-9,10 GND
FP601-9,10 GND
FP601-11 MON M PLL
FP601-12 M 15V
FP601-13 M PLL DAC
FP601-14 LCD 3V
FP601-15 MON M G OUT
FP601-16 MON M R OUT
FP601-17 MON M B OUT
FP601-18 M FRP
FP601-19 M B
FP601-20 M G
FP601-21 M R
FP601-22 VBLK
FP601-23 M HD
FP601-24 LCD SD
FP601-25 LCD SCK
FP601-26 MON CS
HALL SENSOR C.B.A. (VEP06E26A)
IC991 DN8797MS (FORWARD/REVERS)
TO MONITO LCD PANEL FP901
COM
V.ST
V.CK
EN
DWN
VDD
VSS
VDDG
VSSG
SLVSG
WIDE
H.ST
REF
C/R
H.CK2
H.CK1
PSIG
G
R
B
RGT
IC903 C0JBAB000350
IC904 C0JBAB000391
IC905 C0JBAB000247
IC901 C0HBA0000071 (LCD DRIVE)
Q901 B1ADCF000059 (SWITCHING)
Q904 XP0150100L (POWER CONTROL)
QR904 UNR9214J0L (POWER CONTROL)
Q905 B1ACGD000006 (SWITCHING)
QR901 B1GBCFNA0014 (BACKLIGHT CONTROL)
QR902 B1GBCFNA0014 (BACKLIGHT ON)
QR903 B1GBCFJN0017 (BACKLIGHT CONTROL)
Q903 XP0460100L (AMP)
Q906 XP0460100L (AMP)
Q907 XP0460100L (AMP)
Q908 XP0460100L (AMP)
Q902 B1CFNG000001 (BACKLIGHT CONTROL)
T901 ETJ09K44AZ
TO FRAME GND
TO BACKLIGHT
OSD RGB
S/H
CONTRAST
TRAP
LPF
FILTER BIAS
USER-BRIGHT
GAMMA
CLAMP
BLK-LIM
SUB-BRIGHT
POL SW
MATRIX
HCK GEN
S/H GEN
HCOUNTER HPULSE GEN
PICTURE
HUE
PLL COUNTER
PULSE ELM
V CONTROL V POSITION
V COUNTER
V SEP
MODE
H.FILTER
SYNC SEP
PHASE COMPARATOR
HSYNC DET H SKEW DET
CK CONTROL
S/P CONV REGISTER DAC
HDO GEN
VDO GEN
COM-DC
SIG.C
WHITLIM
SUB-CONT R
SUB-CONT B
BLKLIM
SUB-BRT R
SUB-BRT B
PSIG-BRT
MONITOR
01/01
CIRCUIT BOARD NO.
VEP26257A
DRAWING NO.
KR***** (1/1) (0)
SCM043

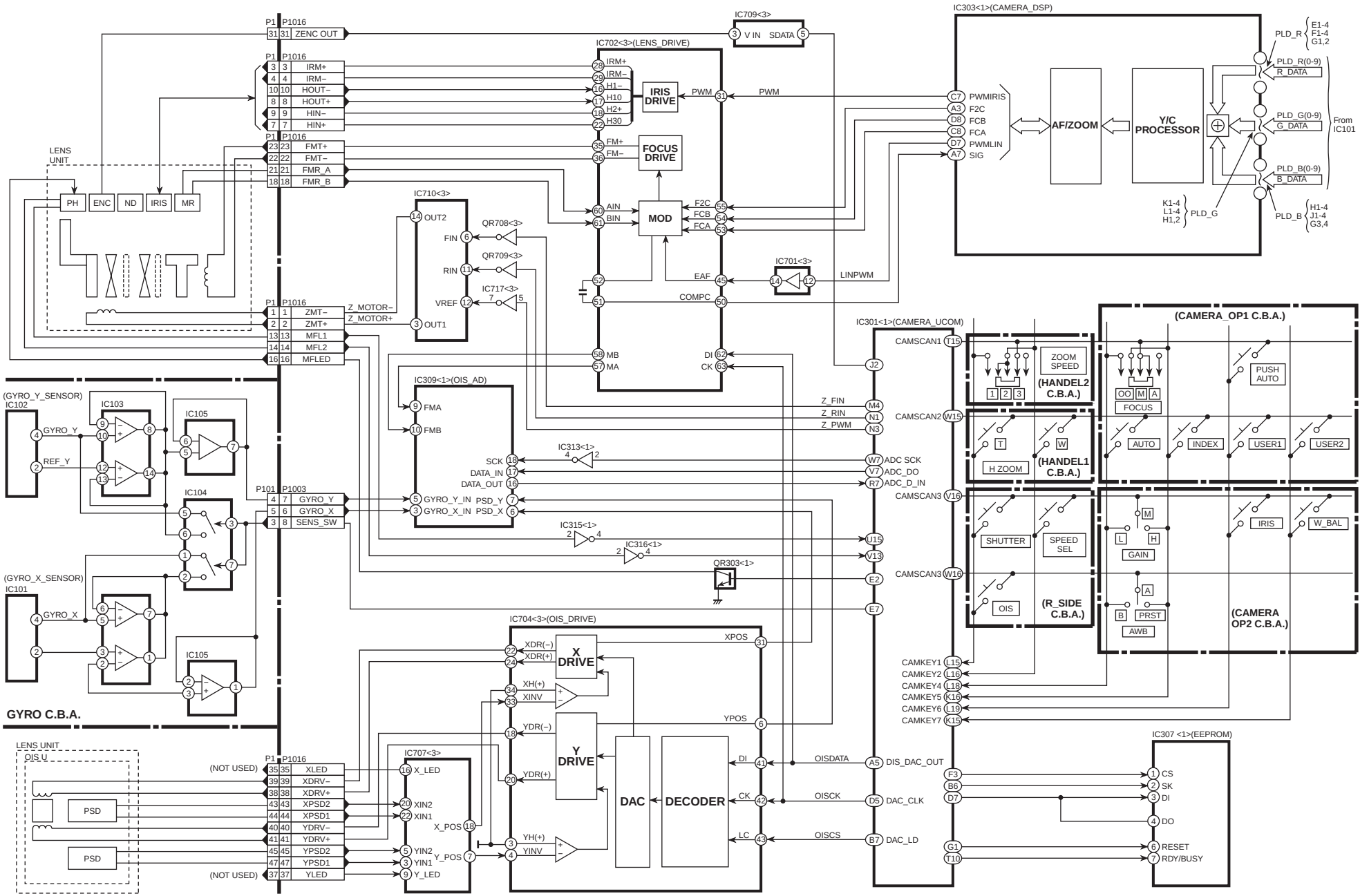
OVERALL BLOCK DIAGRAM



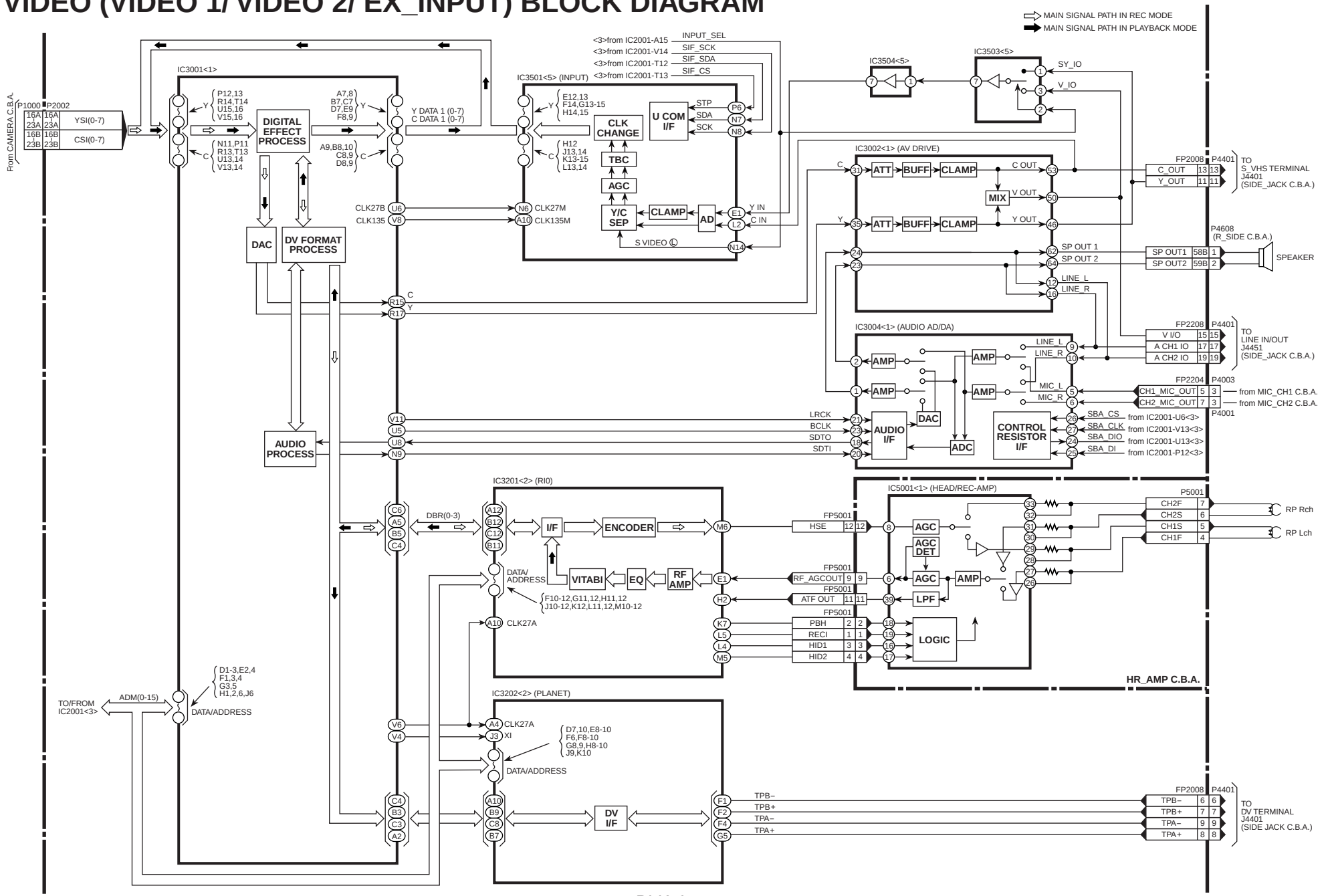
SENSOR/PROCESS(AFE/TG&DRIVE/PROCESS) BLOCK DIAGRAM



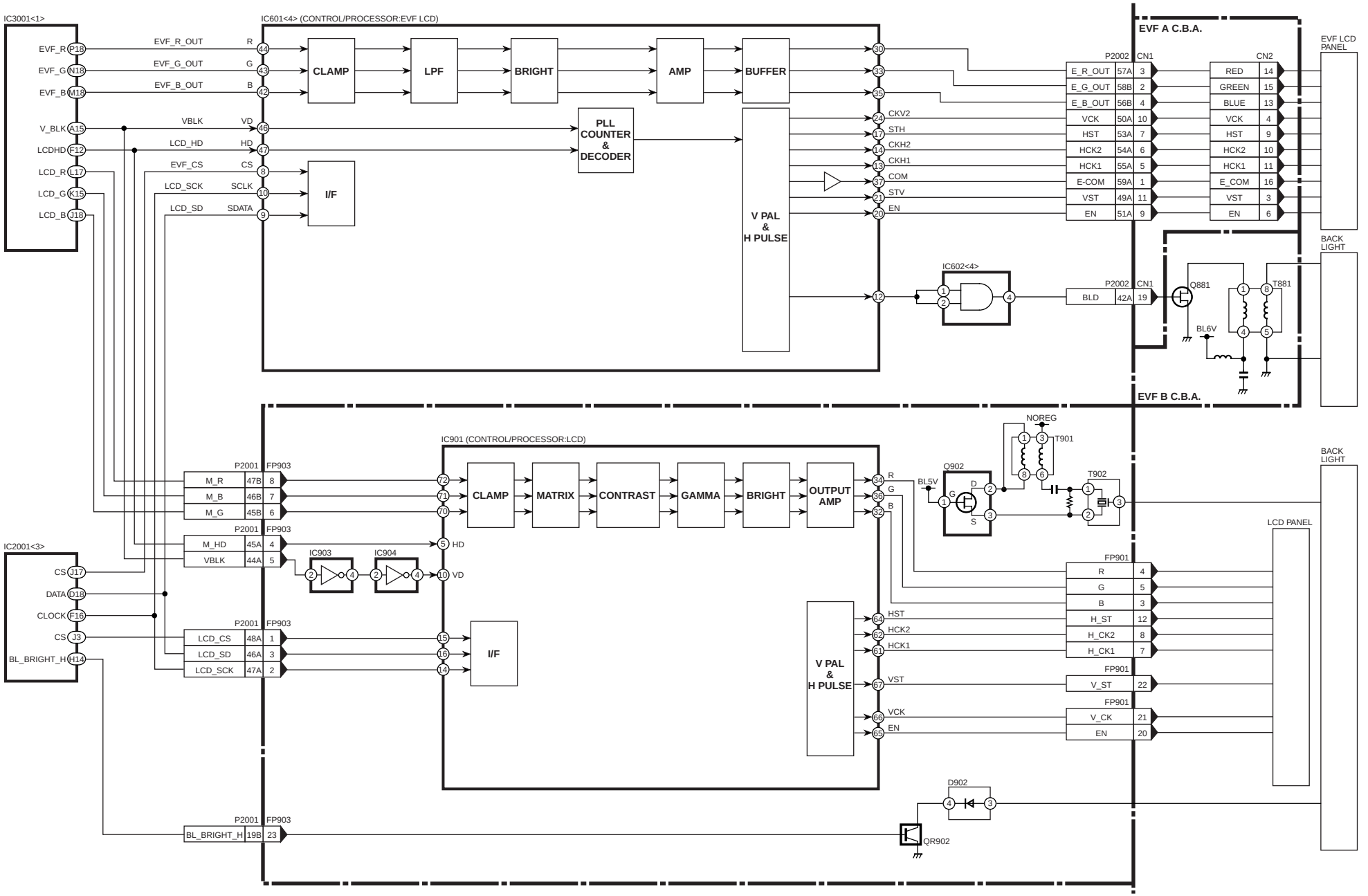
LENS DRIVE (LENS DRIVE / PROCESS) BLOCK DIAGRAM



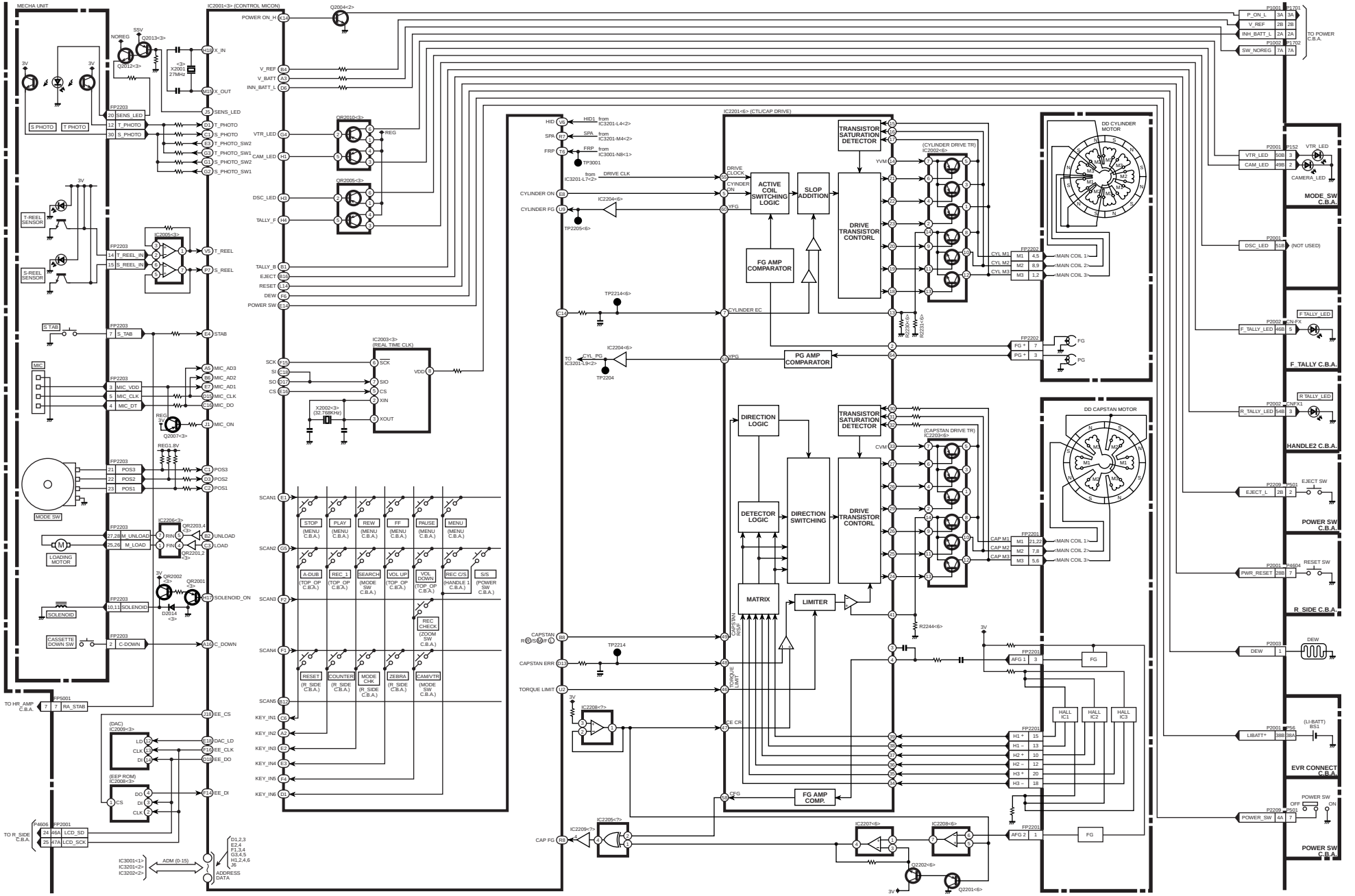
VIDEO (VIDEO 1/ VIDEO 2/ EX_INPUT) BLOCK DIAGRAM



MONITOR (EVF DRIVER / LCD) BLOCK DIAGRAM



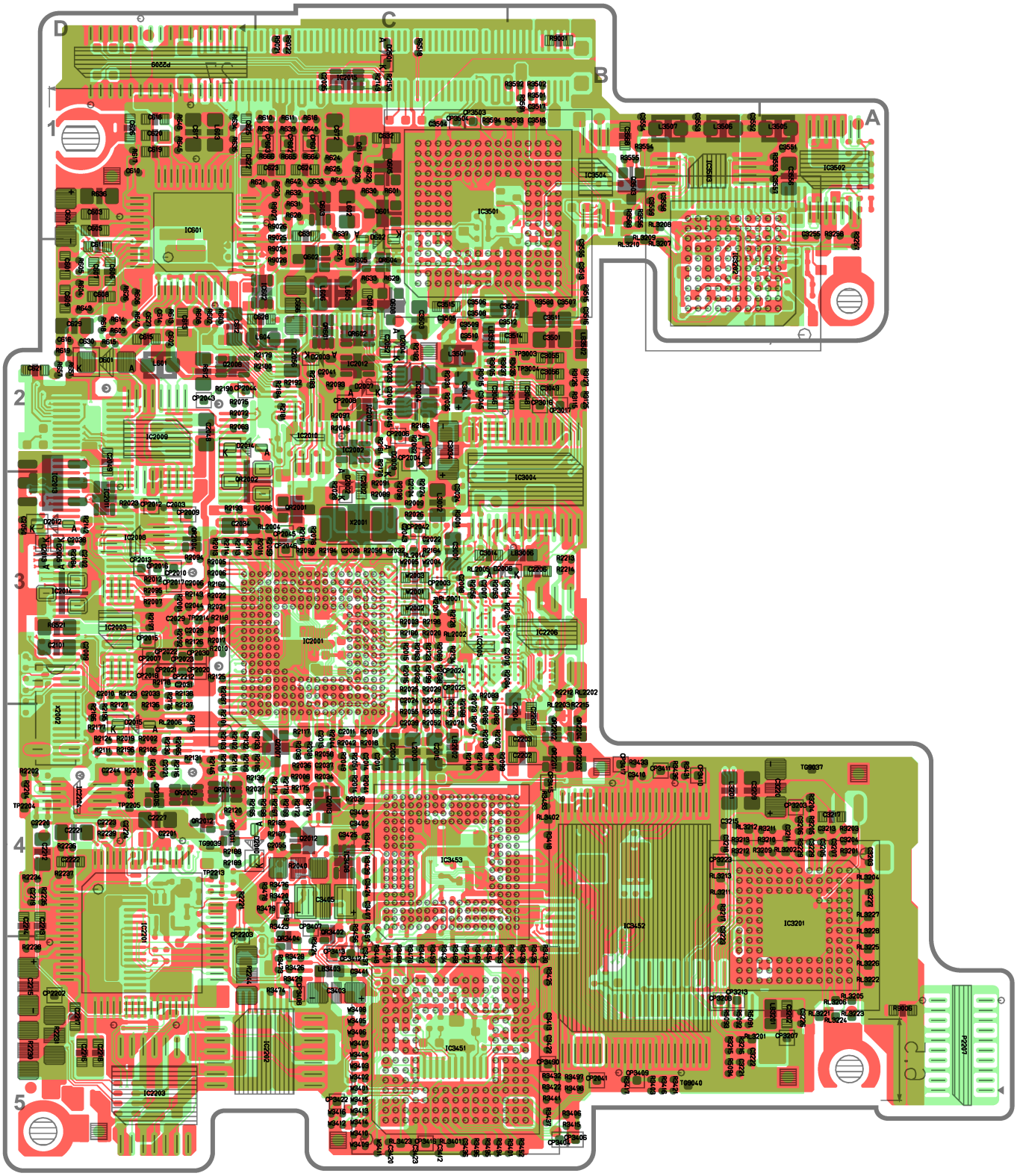
CONTROL (CONTROL/DRIVE) BLOCK DIAGRAM



VTR C.B.A. (VEP03G21A)

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC601	D1	IC2002	C2	IC2011	D3	IC3202	B2	QR601	C2	QR2012	D4	TP2213	D4
IC602	C2	IC2012	C2	IC3408	C4	P2209	D1	QR604	C2	QR2201	B4		
IC2003	D3	IC2013	D3	IC3451	C5	Q603	C1	QR605	C2	QR2202	B4		
IC2003	D5	IC2015	C1	IC3452	B4	Q608	C2	QR2001	C3	QR2203	B4		
IC2004	C2	IC2201	D4	IC3453	C4	Q611	C1	QR2002	D3	QR2204	B4		
IC2005	C3	IC2202	C5	IC3501	C1	Q2007	C4	QR2004	D3	QR3402	C4		
IC2007	C2	IC2204	D4	IC3502	A1	Q2008	D2	QR2005	D4	QR3404	C5		
IC2008	D3	IC2206	B3	IC3503	B1	Q2012	C4	QR2006	D4	TG9037	A4		
IC2009	D2	IC3004	B3	IC3504	B1	Q2013	C4	QR2010	D4	TG9039	D4		
IC2001	C3	IC2010	C2	IC3201	A4	Q3503	B1	QR2011	D4	TP2204	D4		



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VTR C.B.A. (VEP03G21A)

COMPONENT SIDE

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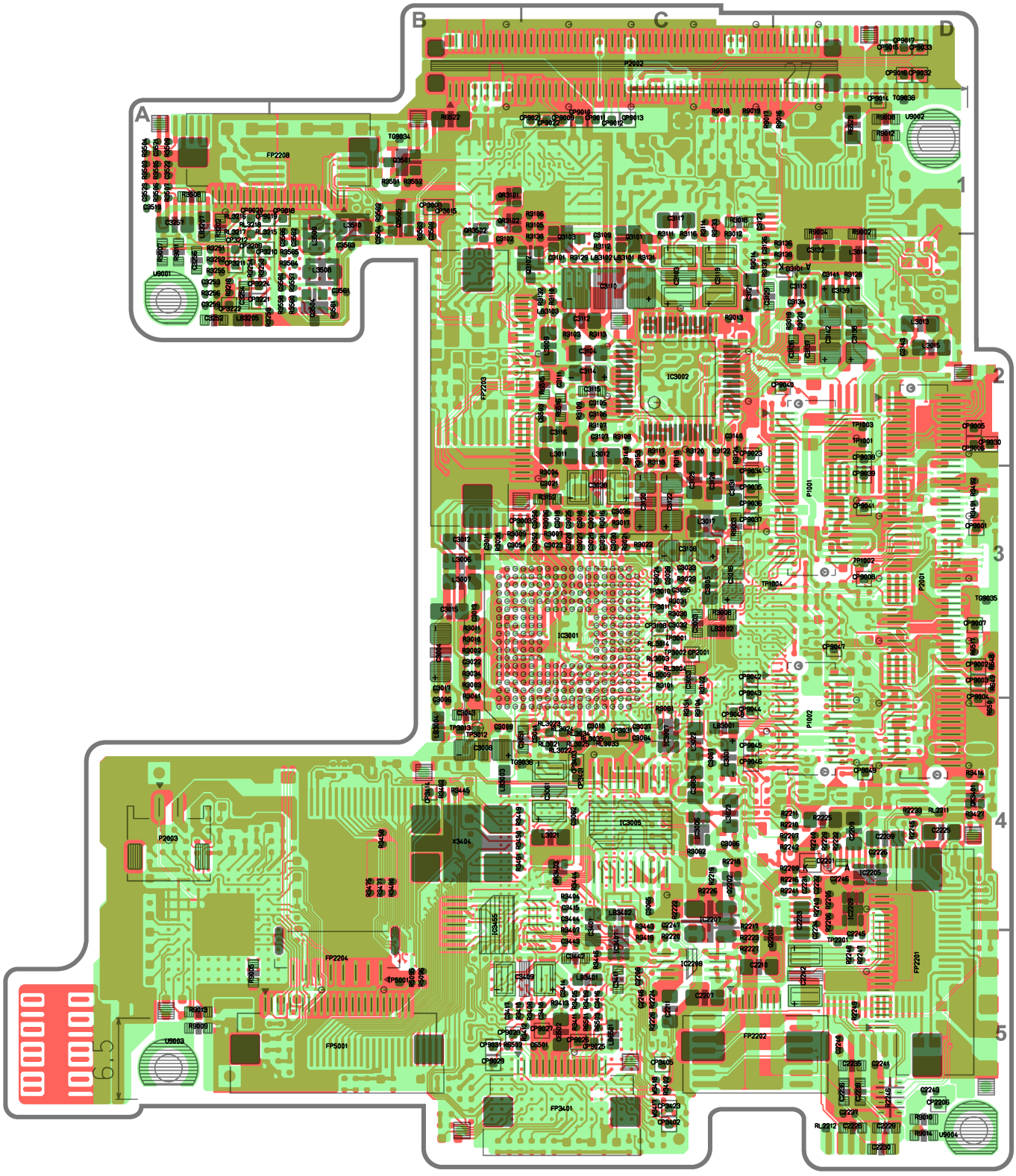
IC2207	C4	IP5001	B5	Q3501	B1	TG9035	D3	TP3011	C3
IC2208	C5	P1001	D3	Q3504	B2	TG9038	D1	TP3012	B4
IC2209	D4	P1002	D4	Q3506	B1	TP1001	D2	TP3013	B4
IC3001	C3	P2001	D3	QR3101	B1	TP1002	D3		
IC3002	C2	P2002	C1	QR3102	B1	TP1003	D2		
IC3005	C4	P2003	A4	QR3401	D4	TP1004	C3		
IC3006	C4	Q2201	C5	QR3403	C4	TP2201	D5		
IC3007	C4	Q2202	C4	QR3502	B1	TP3001	C3		
IC3407	C5	Q3102	C2	TG3036	B4	TP3002	C3		



(COMPONENT SIDE)

CAMERA C.B.A. (VEP23571A)

FOIL SIDE

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IC2	B1	IC103	B3	IC117	A5	IC308	D1	IC317	C2	Q110	B3
IC4	C1	IC106	B4	IC119	A4	IC309	C2	P1001	D2	Q306	D1
IC5	B1	IC113	B2	IC121	B3	IC313	C2	Q101	B2	QR301	D3
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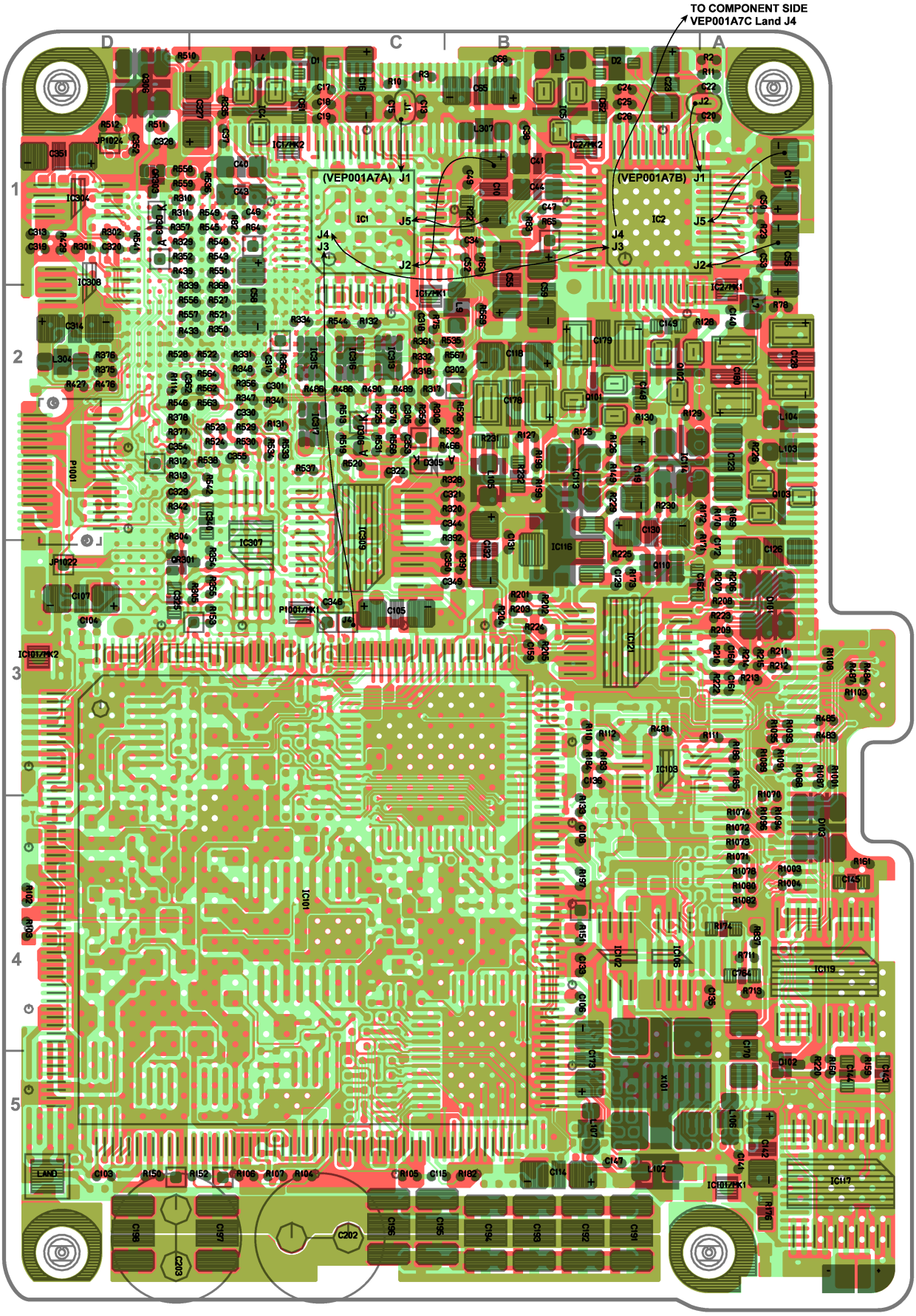

(FOIL SIDE)

CBA-3

CAMERA C.B.A. (VEP23571A)

COMPONENT SIDE

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IC3	B1	IC107	B2	IC112	B2	IC124	C2	IC703	D5	IC711	C5	P1000	C1	Q701	C3	QR705	D4
IC6	B2	IC108	B2	IC118	B3	IC301	C2	IC704	B5	IC713	D5	P1002	A5	Q702	D4	QR708	C4
IC7	B1	IC109	B3	IC120	B2	IC303	C2	IC707	B4	IC716	B3	P1003	A4	Q708	D4	QR709	C4
IC104	B2	IC110	B3	IC122	B2	IC701	D3	IC709	B3	IC717	C5	P1004	A2	Q709	C4		
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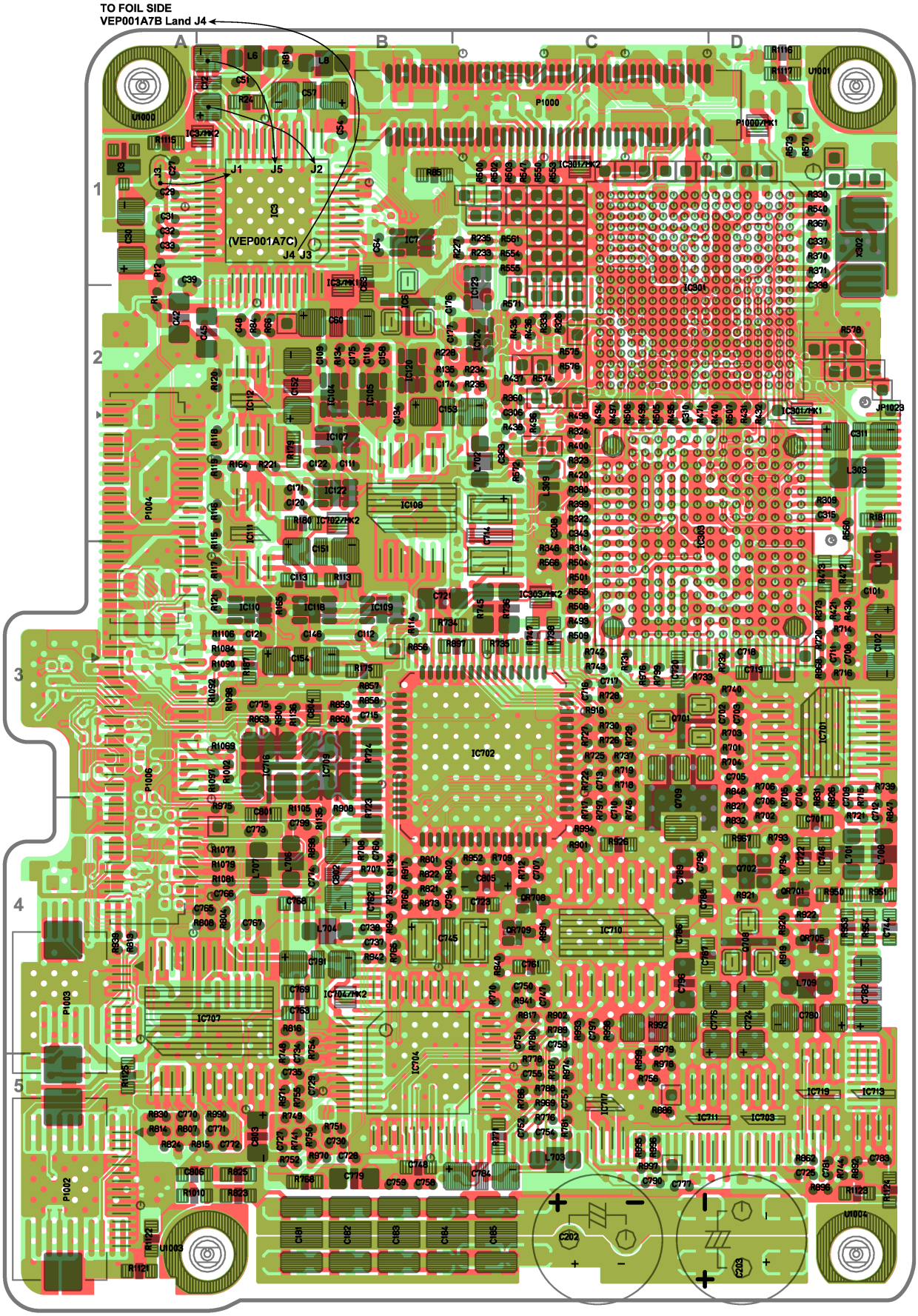
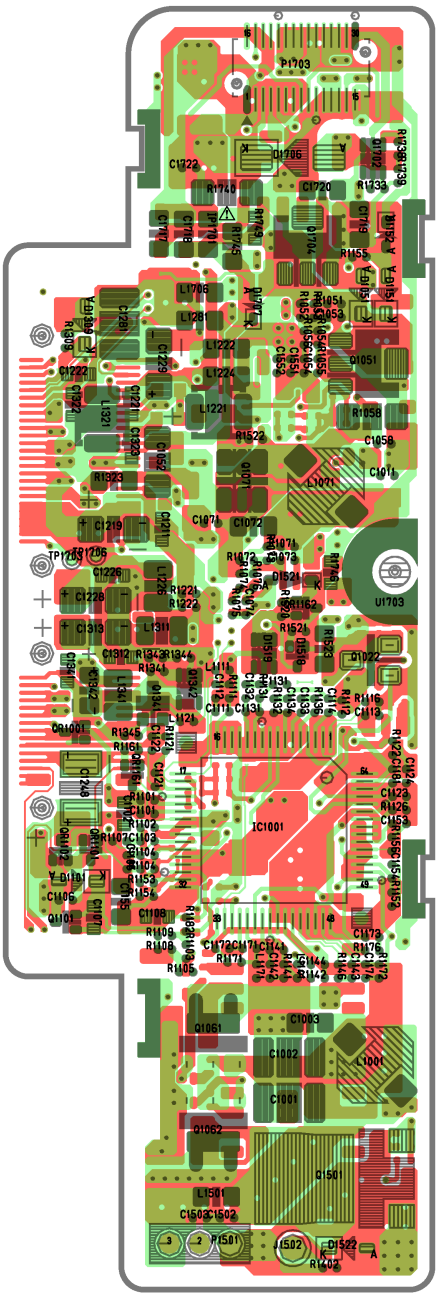


(COMPONENT SIDE)

POWER C.B.A. (VEP01914A)

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

⚠ 警 告 ⚠ 印の部品は安全上重要な部品です。
交換するときは、安全及び性能維持のため必ず指定の部品をご使用ください。



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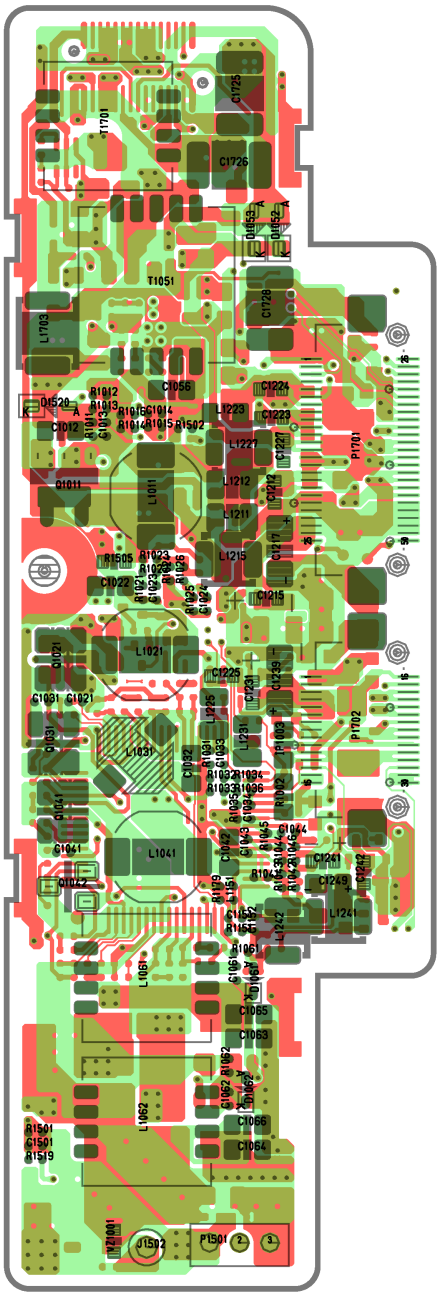
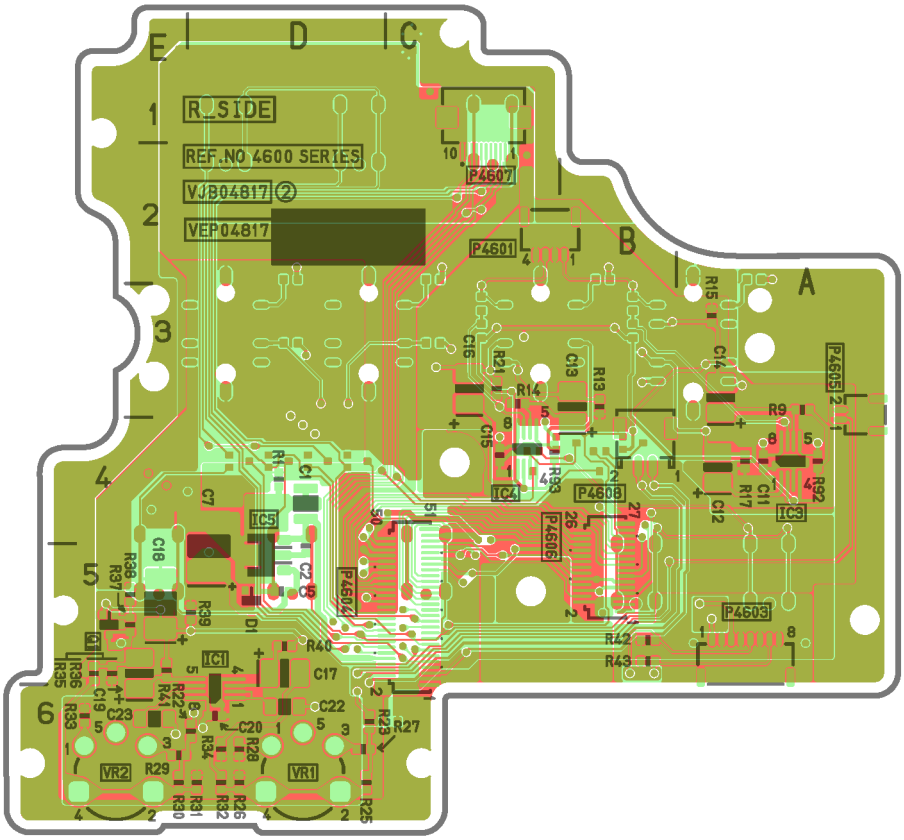


(COMPONENT SIDE)

R SIDE C.B.A. (VEP04817A)

FOIL SIDE

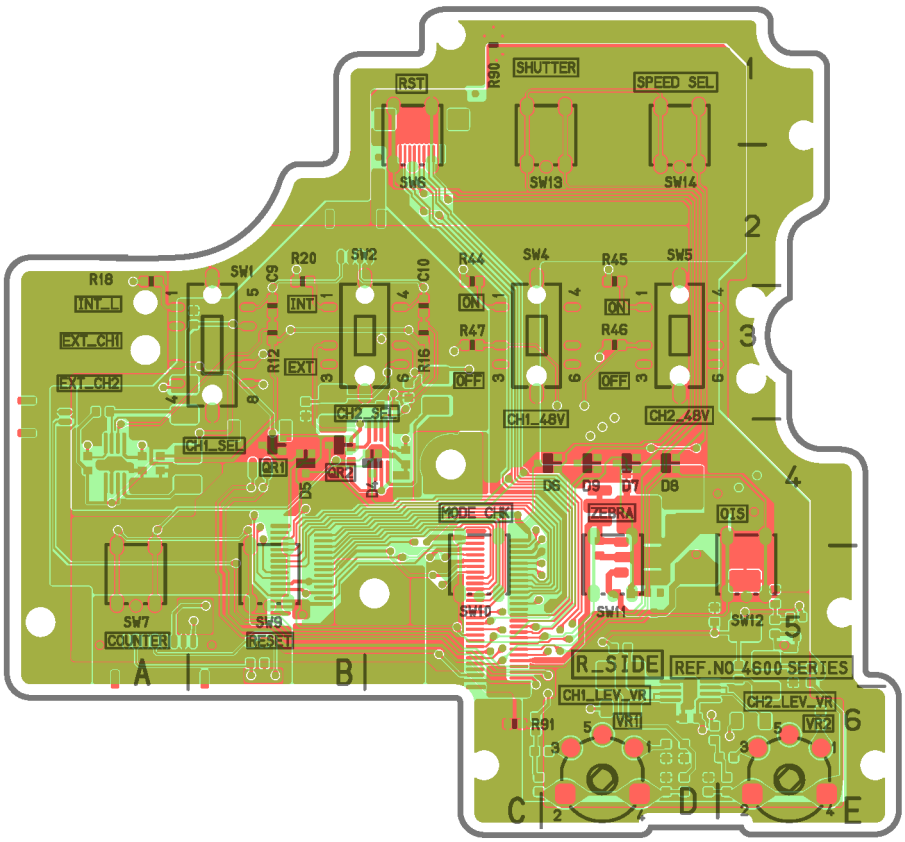
REF	LOC
IC1	D6
IC3	A4
IC4	C4
IC5	D5
P4601	C2
P4603	A5
P4604	C5
P4605	A4
P4606	B5
P4607	C1
P4608	B4
Q1	E5
VR1	D6
VR2	E6



(FOIL SIDE)

COMPONENT SIDE

REF	LOC
QR1	B4
QR2	B4
VR1	D6
VR2	E6



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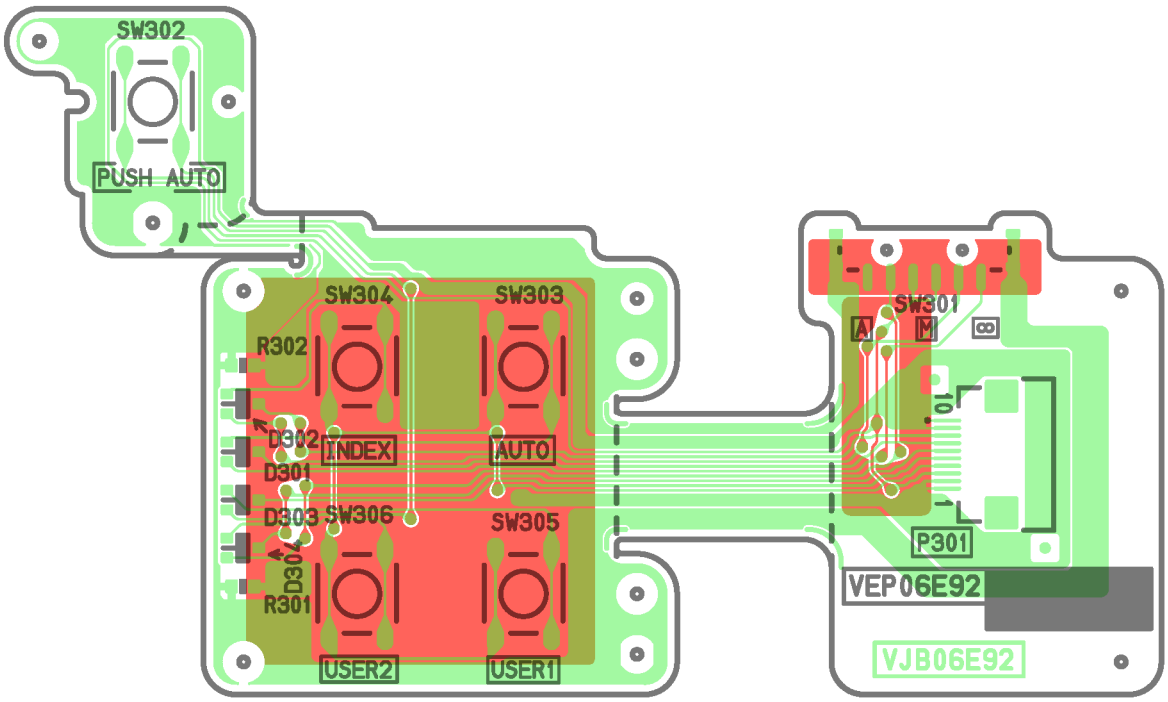
CAMERA OP1 FLEX C.B.A. (VEP06E92A)



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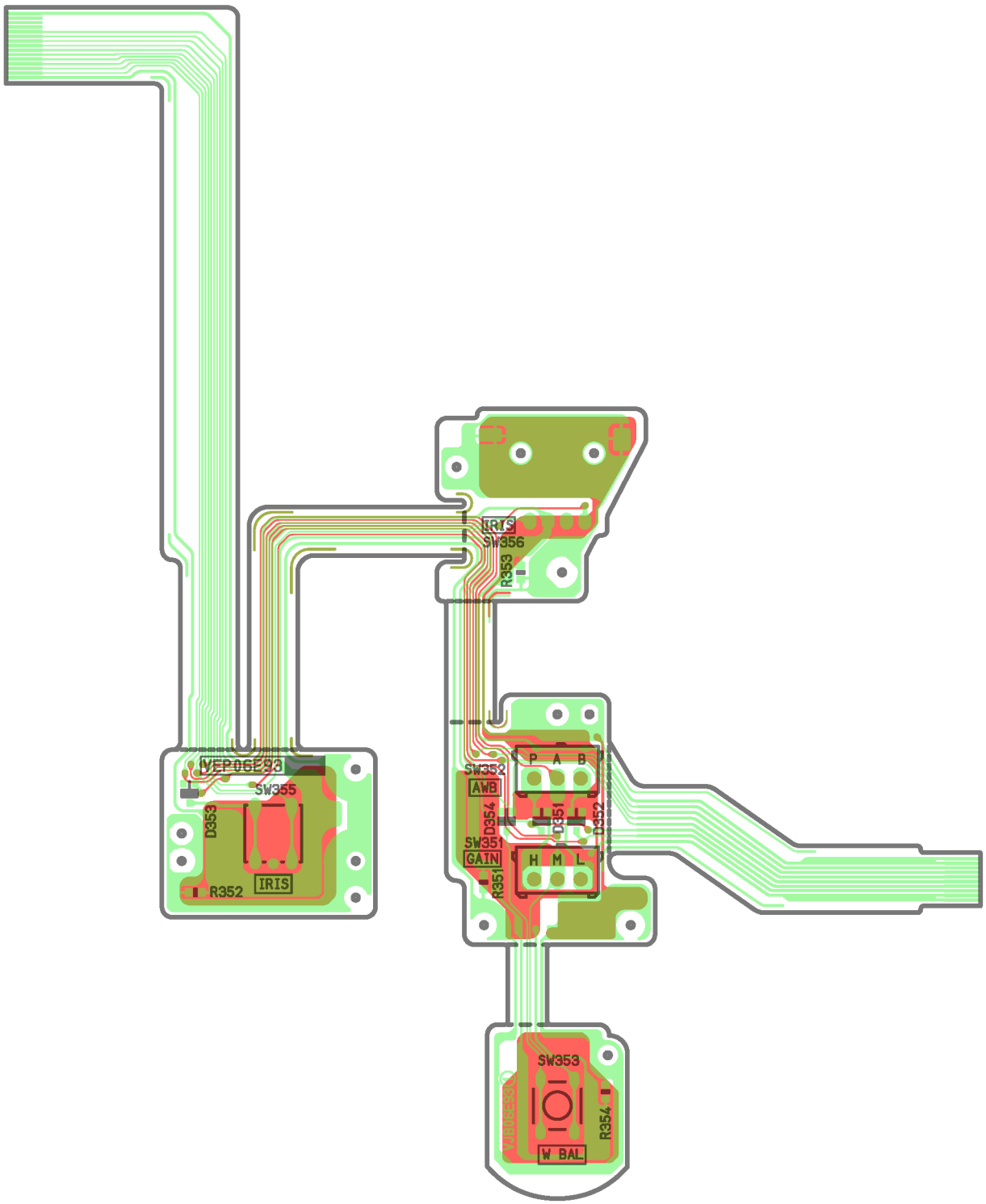
CAMERA OP2 ELEX C.B.A. (VEP06E93A)



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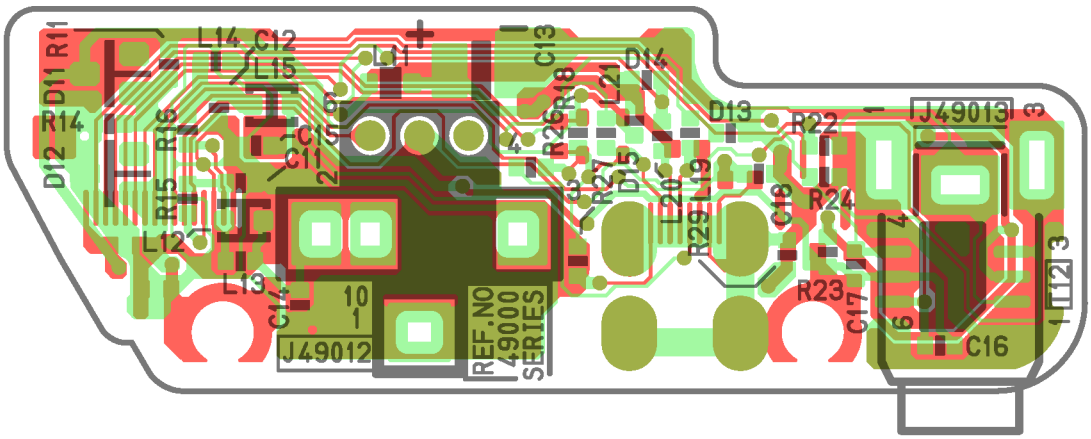
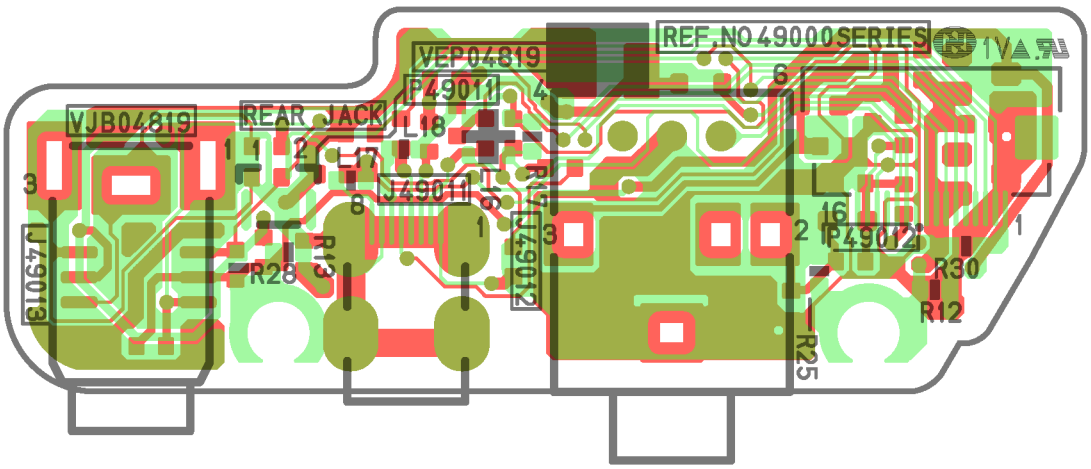
REAR JACK C.B.A. (VEP04819A)



(FOIL SIDE)



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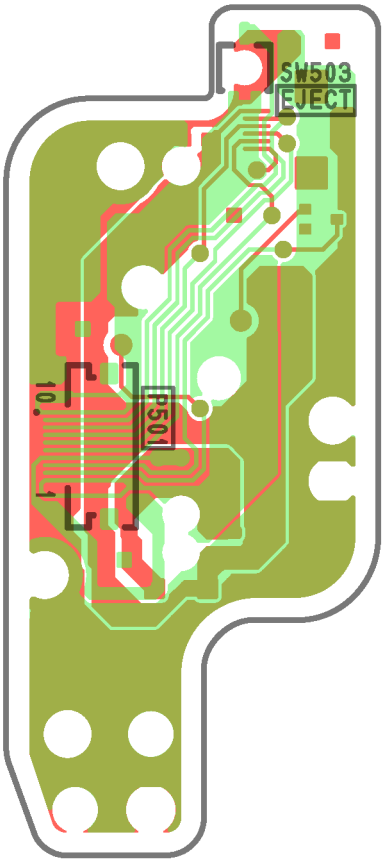
POWER SW C.B.A. (VEP06E96A)



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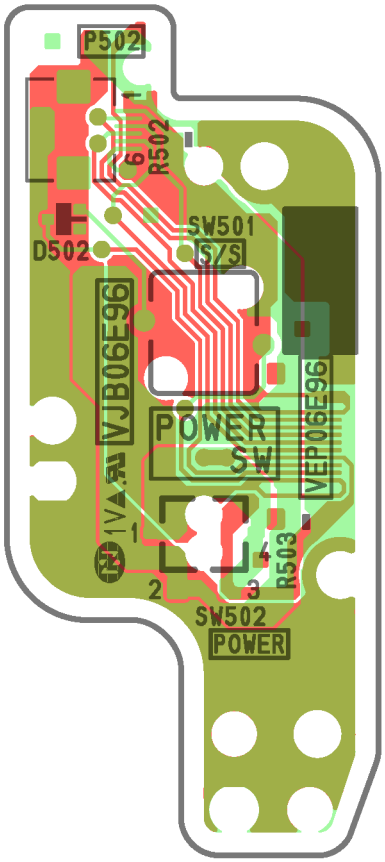

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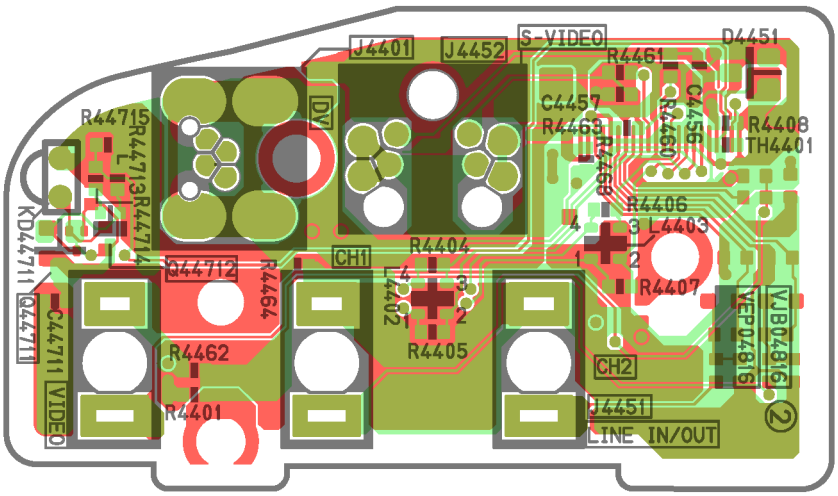
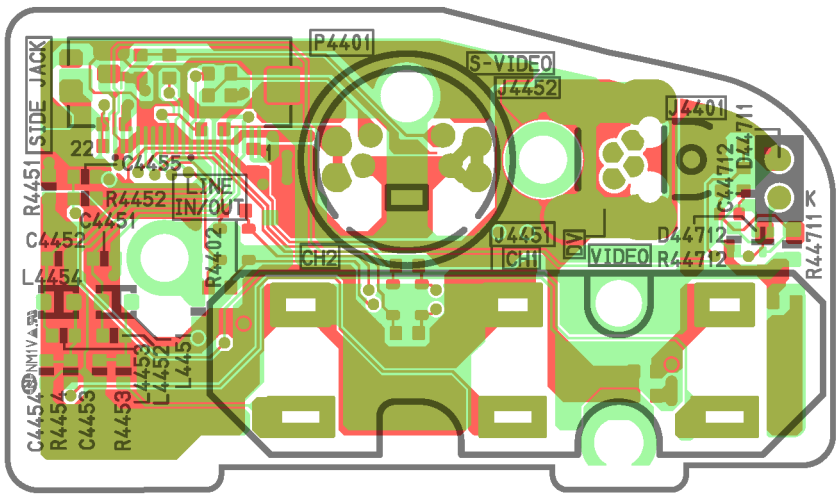
SIDE JACK C.B.A. (VEP04816A)



(FOIL SIDE)



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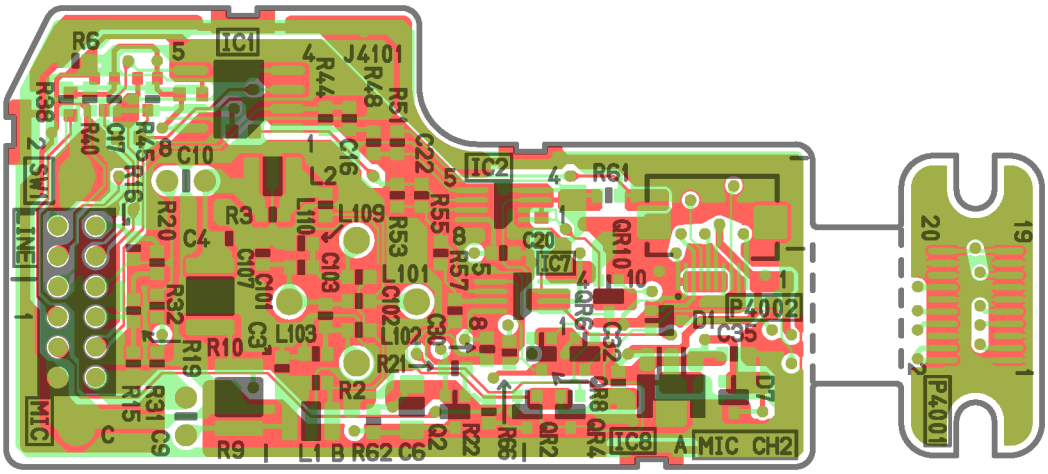
MIC CH2 C.B.A. (VEP04815A)



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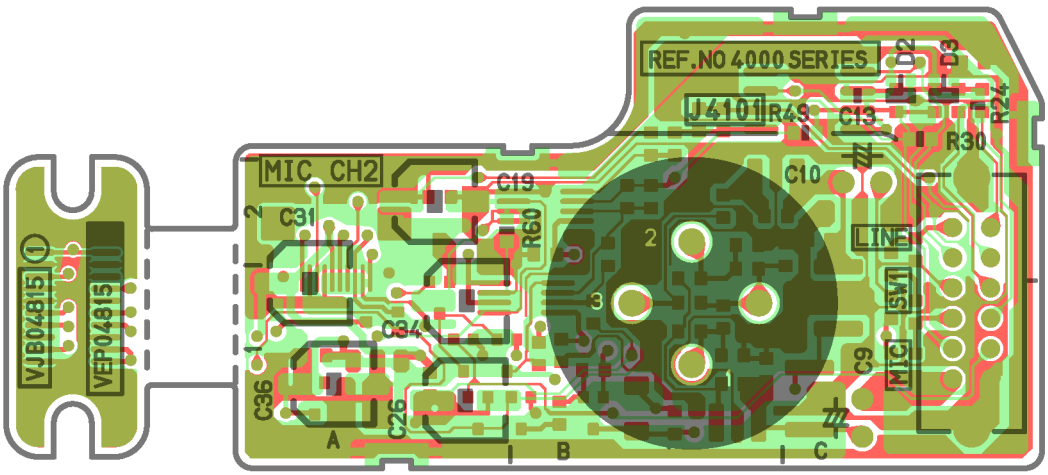
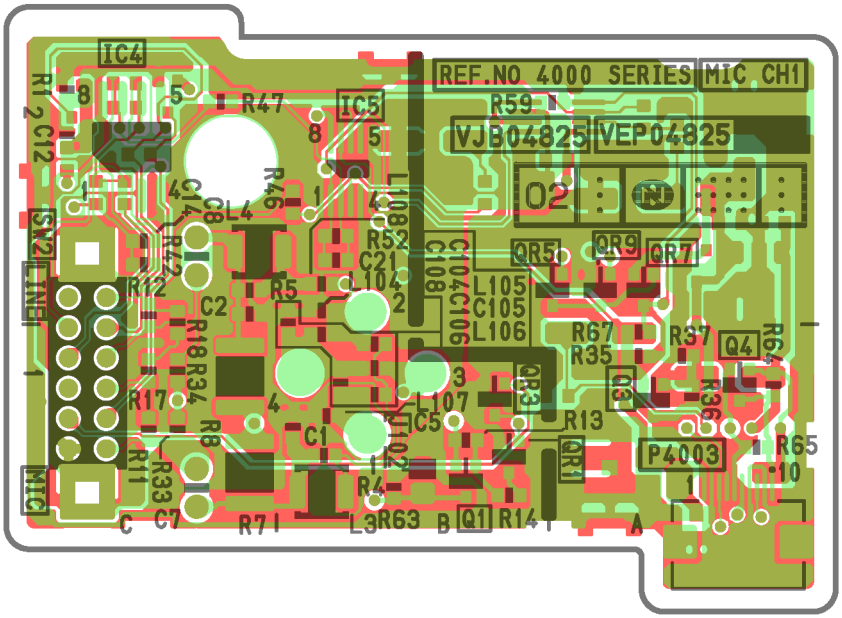


(COMPONENT SIDE)

MIC CH1 C.B.A. (VEP04825A)



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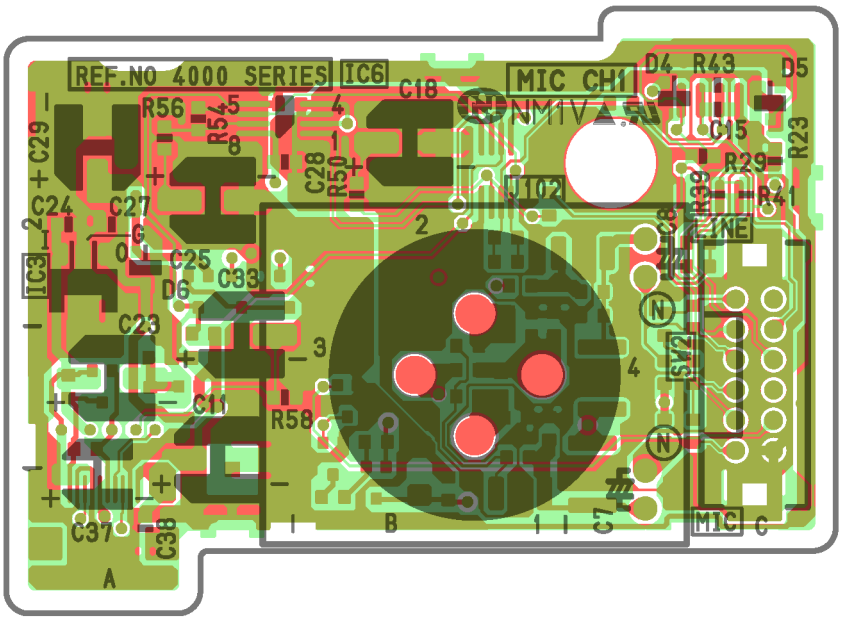

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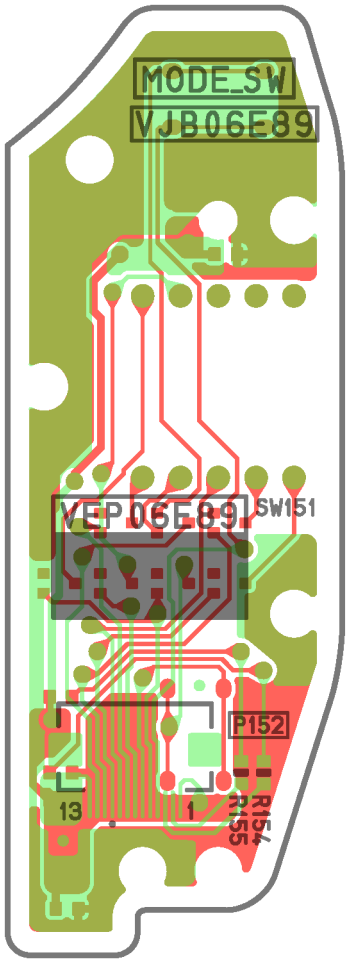
MODE SW C.B.A. (VEP06E89A)



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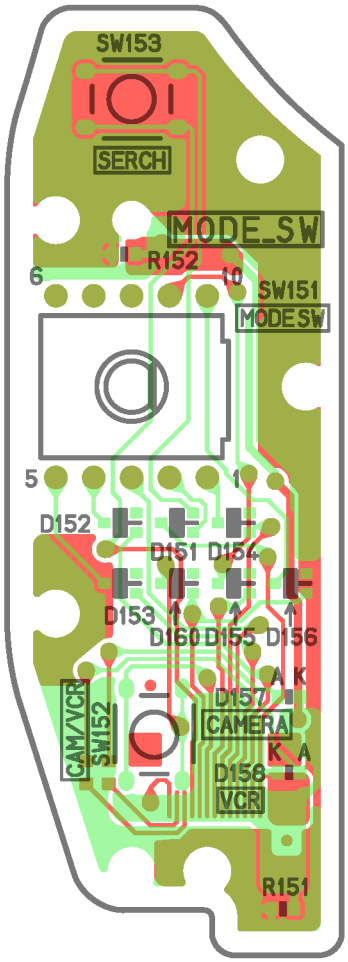

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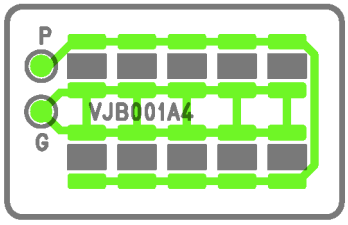
VTR SUB C.B.A. (VEP001A4A)



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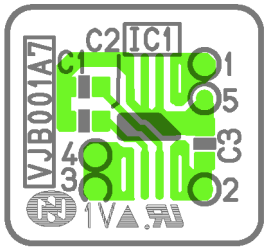
CAMERA SUB 1/2/3 C.B.A. (VEP001A7A/B/C)

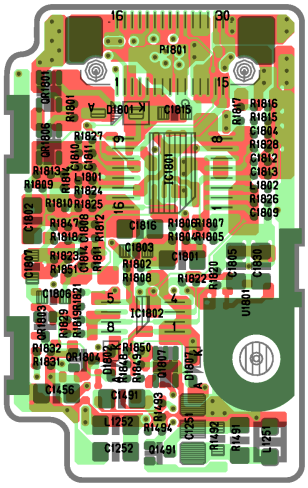


(COMPONENT SIDE)

POWER SUB C.B.A. (VEP001A6A)

(COMPONENT SIDE)

POWER 2 C.B.A. (VEP01922A)



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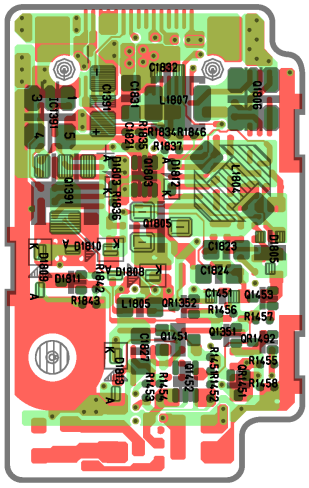
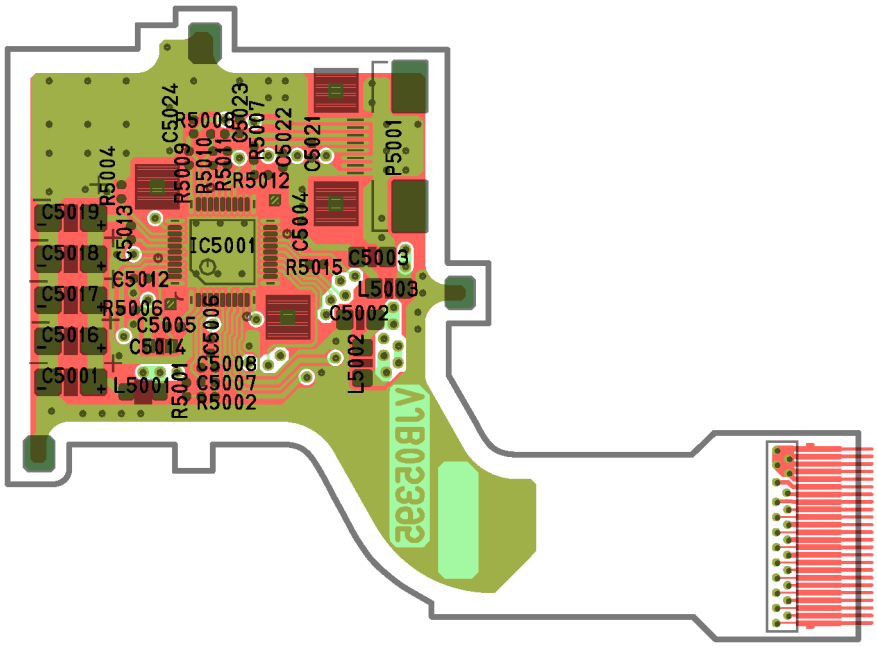


(COMPONENT SIDE)

HR AMP C.B.A. (VEP05395A)



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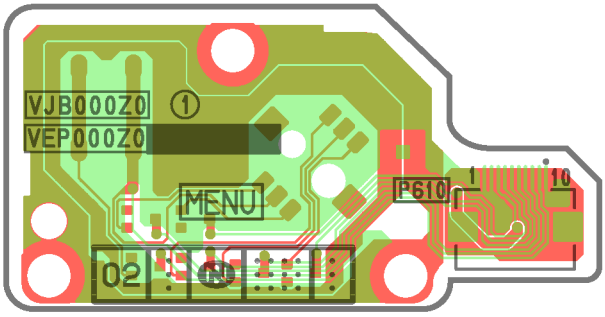
MENU C.B.A. (VEP000Z0A)



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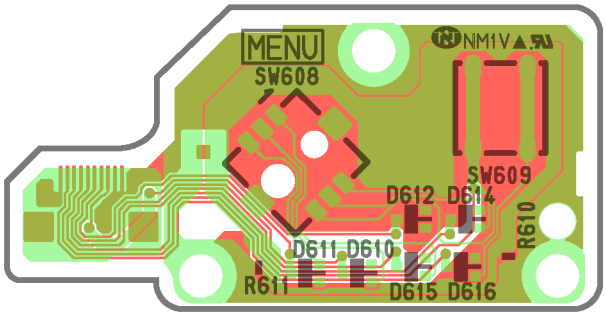

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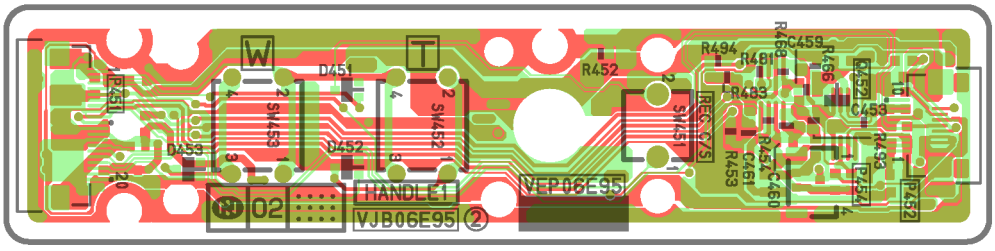
HANDLE 1 C.B.A. (VEP06E95A)



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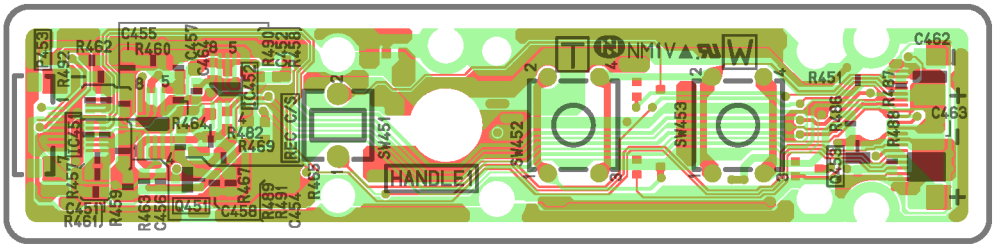

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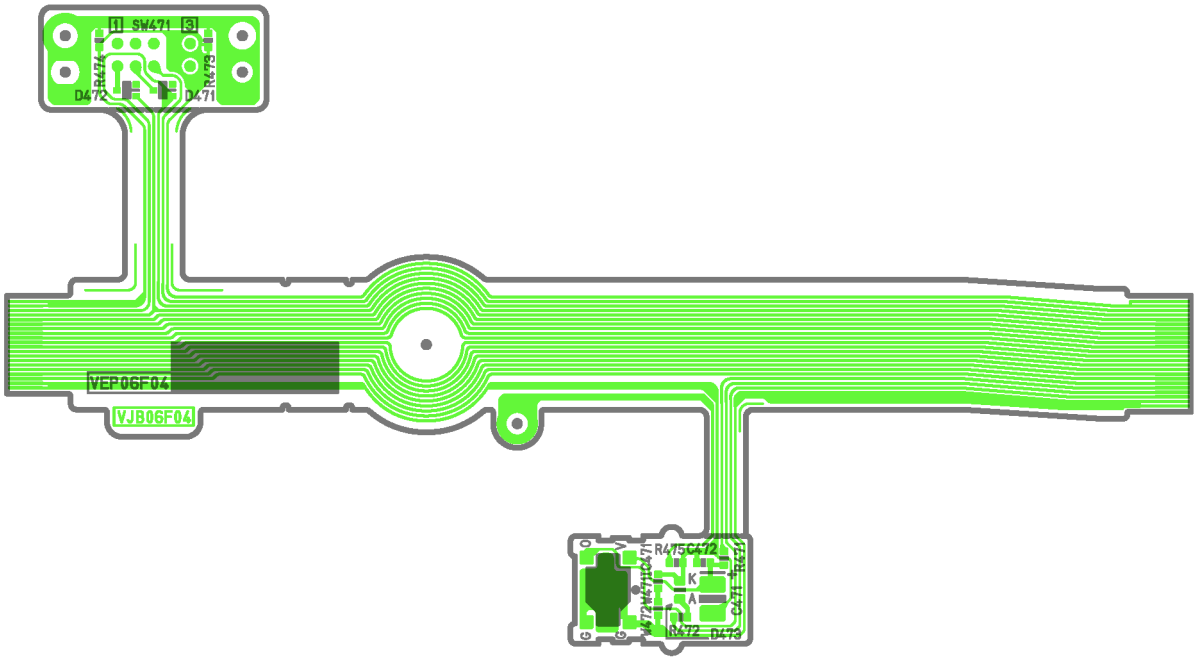
HANDLE 2 FLEX C.B.A. (VEP06F04A)



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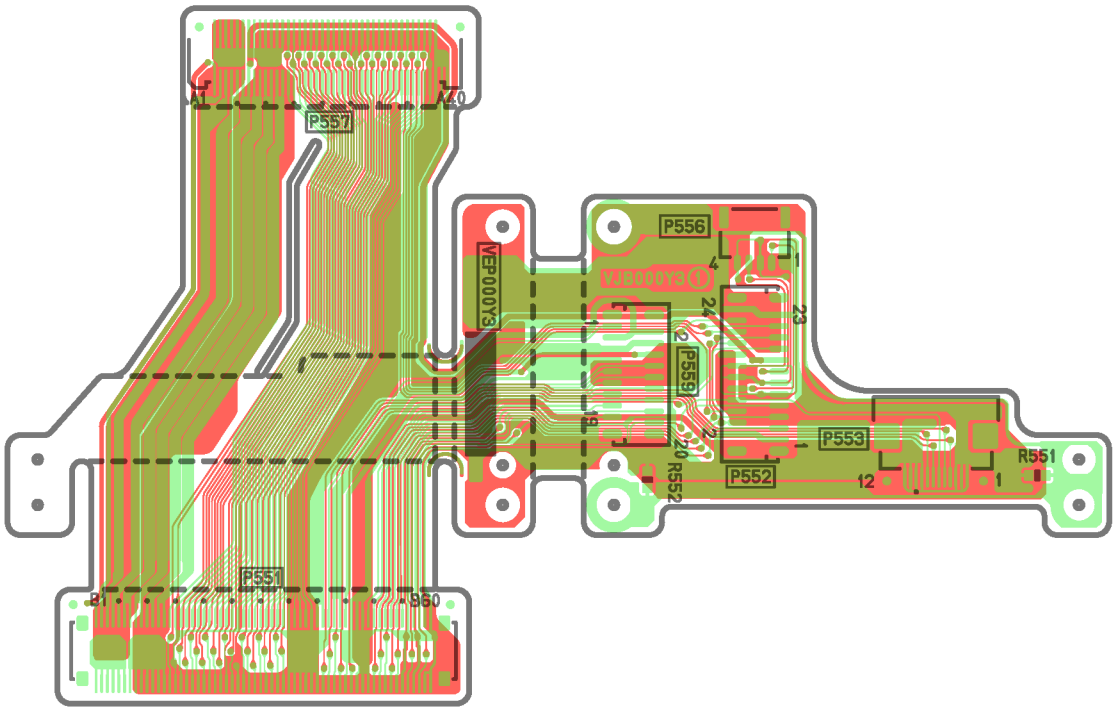
VC CONNECT C.B.A. (VEP000Y3A)



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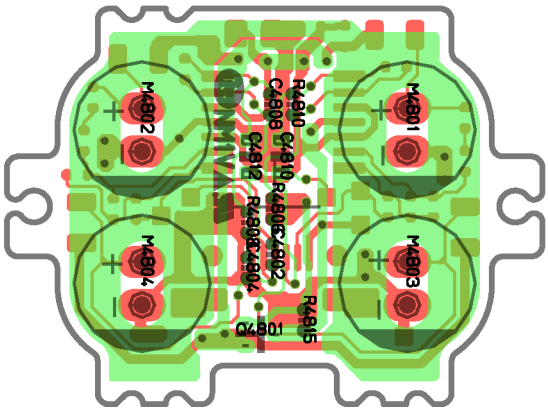
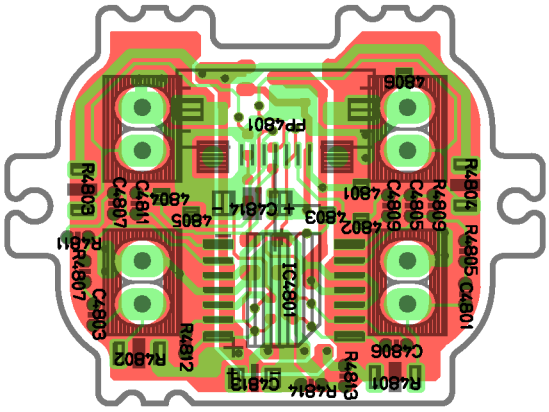
MIC C.B.A. (VEP04828A)

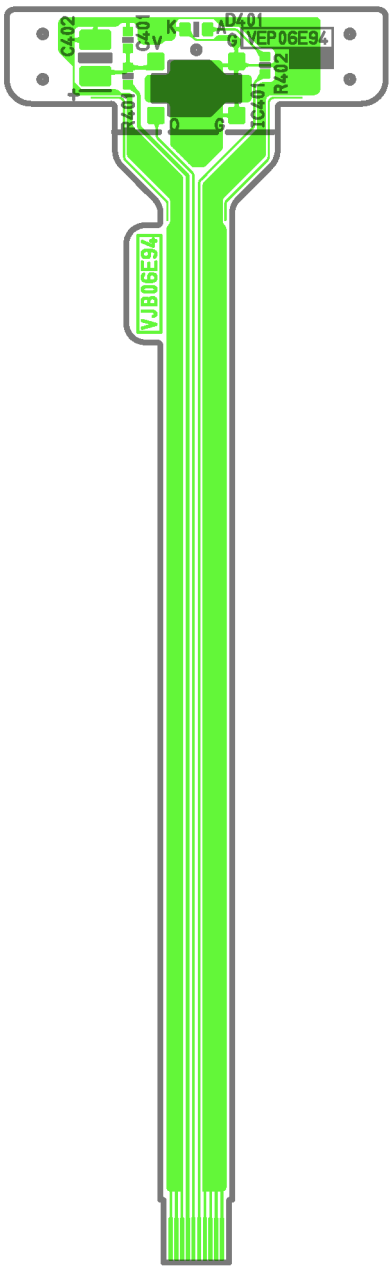


(FOIL SIDE)



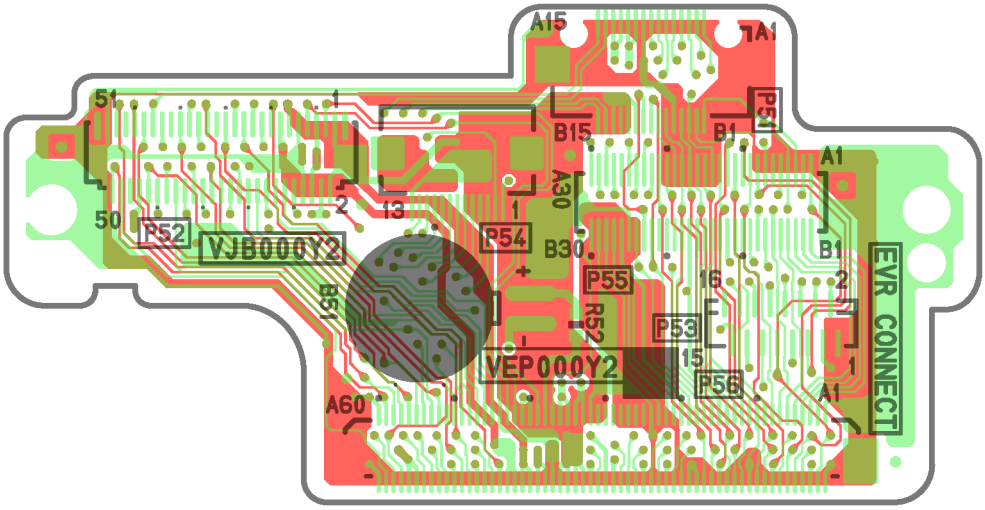
(COMPONENT SIDE)

F TALLY FLEX C.B.A. (VEP06E94A)



(COMPONENT SIDE)

EVR CONNECT C.B.A. (VEP000Y2A)



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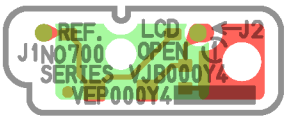
LCD OPEN C.B.A. (VEP000Y4A)



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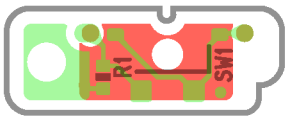
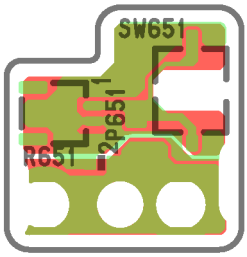


(COMPONENT SIDE)

EJECT C.B.A. (VEP000Y7A)



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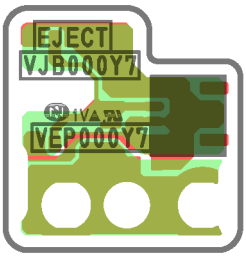

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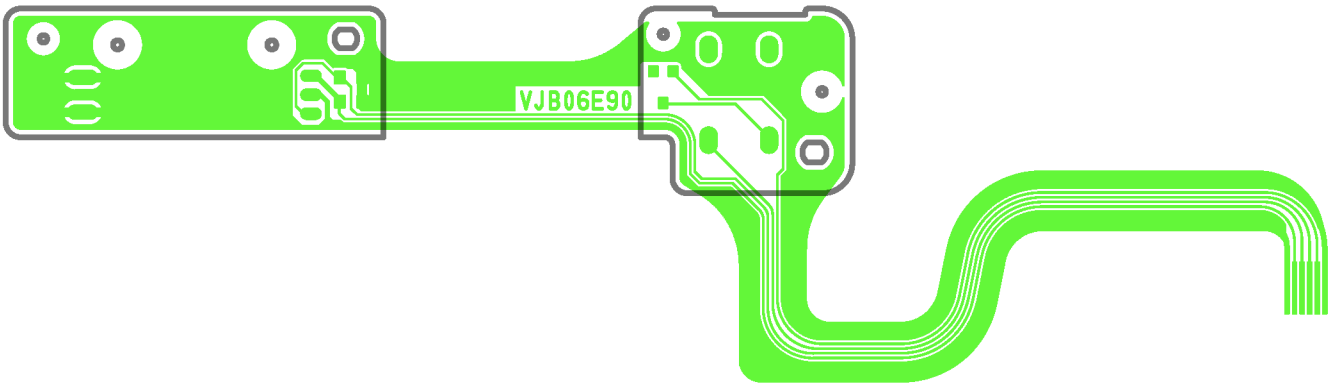
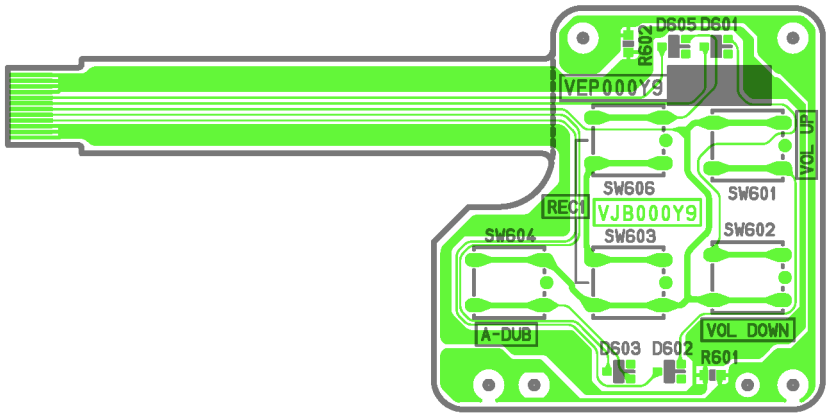
ZOOM SW FLEX C.B.A. (VEP06E90A)



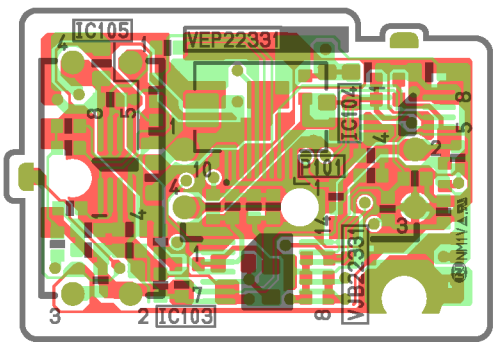
(COMPONENT SIDE)

TOP OP C.B.A. (VEP000Y9A)



(COMPONENT SIDE)

GYRO C.B.A. (VEP22331A)



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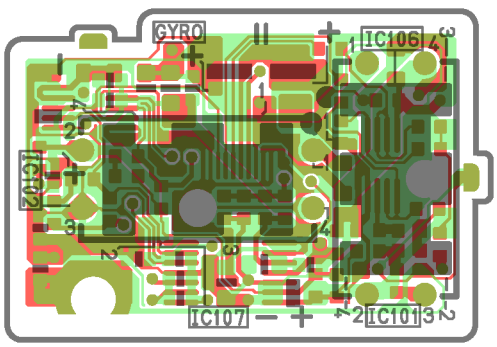
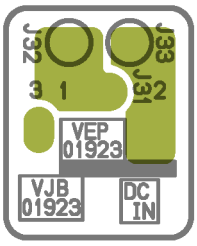


(COMPONENT SIDE)

DC IN C.B.A. (VEP01923A)



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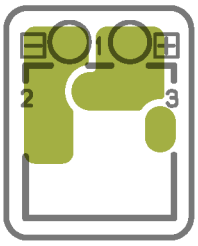
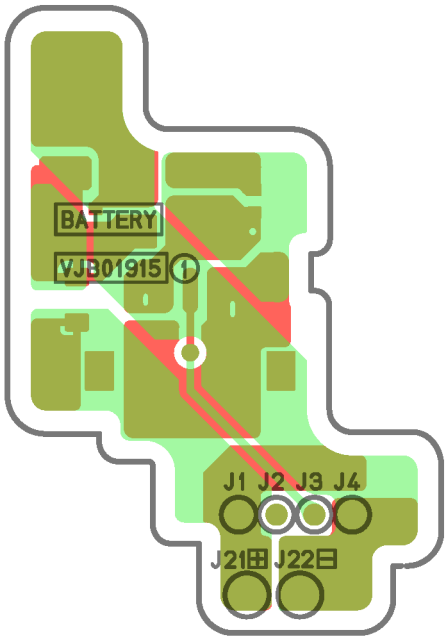


(COMPONENT SIDE)

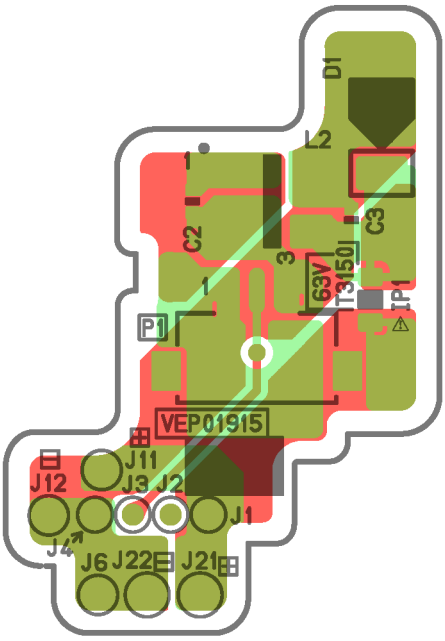
BATTERY C.B.A. (VEP01915A)

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

⚠ 警 告 ⚠ 印の部品は安全上重要な部品です。
交換するときは、安全及び性能維持のため必ず指定の部品をご使用ください。

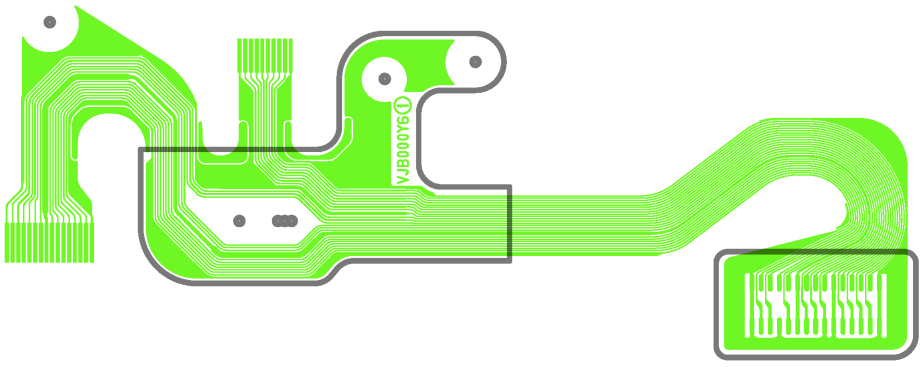


(FOIL SIDE)



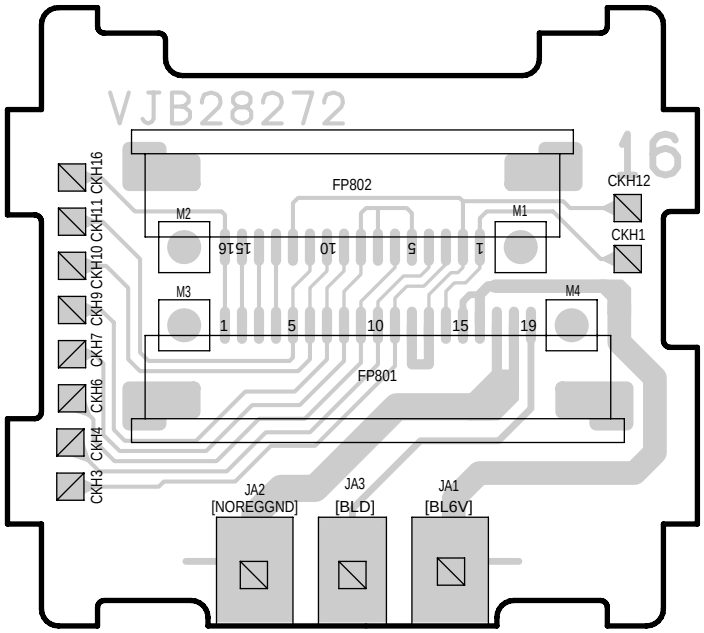
(COMPONENT SIDE)

REAR JACK CONNECT C.B.A. (VEP000Y6A)



(COMPONENT SIDE)

EVF A C.B.A. (VEP28272B)



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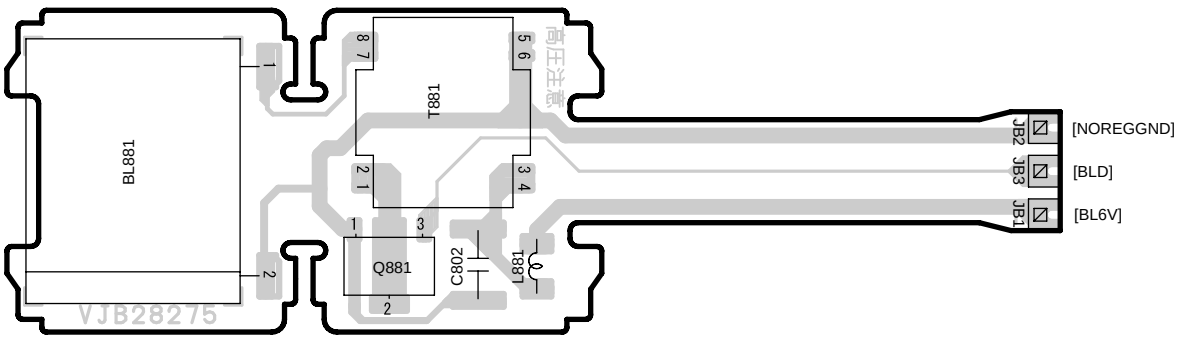
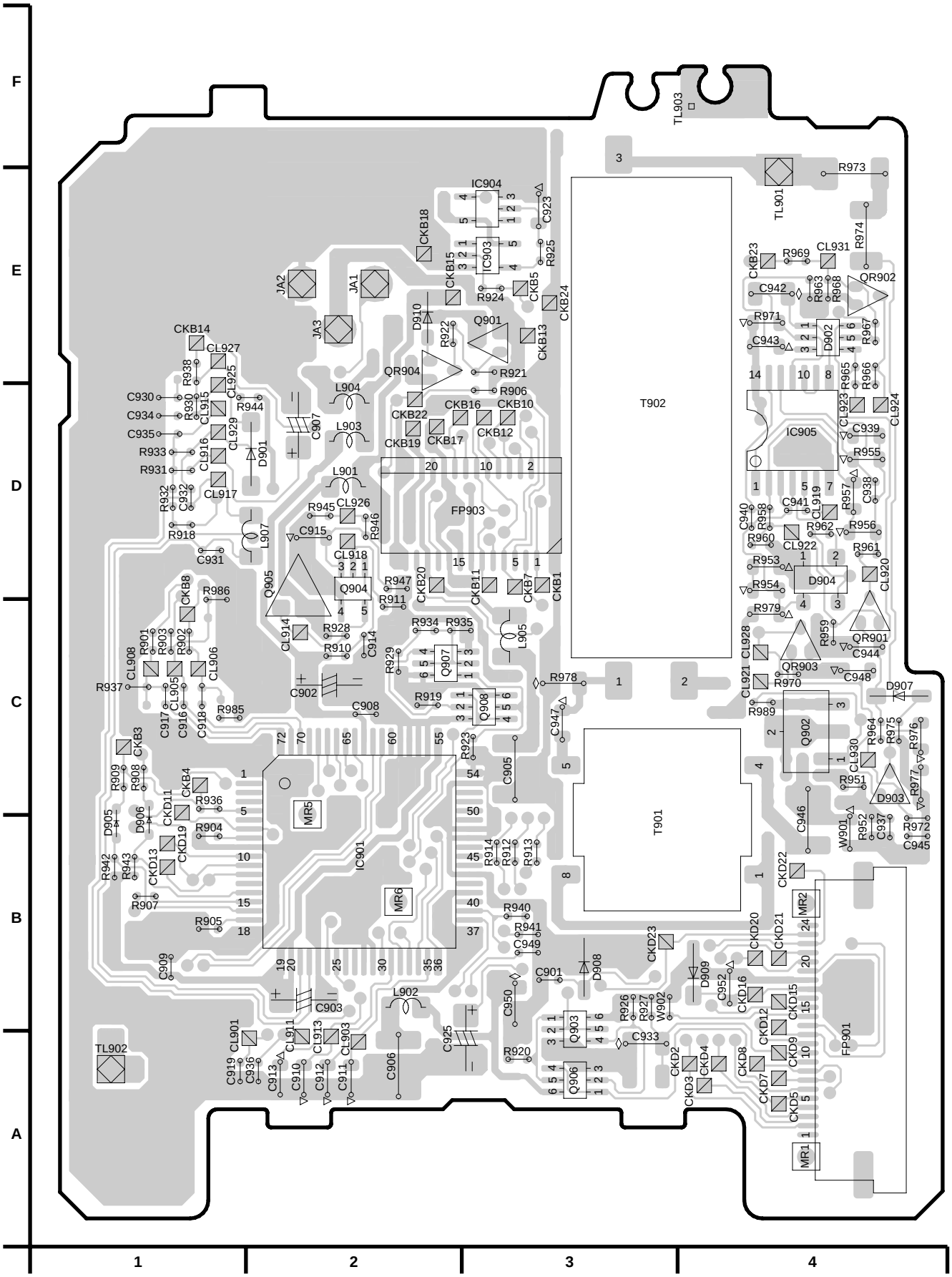
EVF B C.B.A. (VEP28275B)



(COMPONENT SIDE)

MONITOR C.B.A. (VEP26257A)



(COMPONENT SIDE)

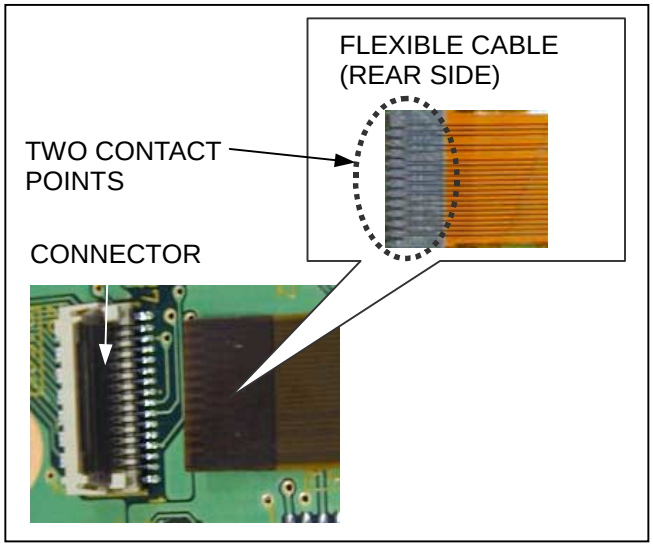
MONITOR C.B.A. (VEP26257A)

Monitor C.B.A.											
Integrated Circuit		CL921	C-4	L907	D-2	C939	D-4	R924	E-3	R962	D-4
IC901	B-2	CL922	D-4	**Transformer**		C940	D-4	R925	E-3	R963	E-4
IC903	E-3	CL923	D-4	T901	B-3	C941	D-4	R926	B-3	R964	C-4
IC904	E-3	CL924	D-4	T902	D-3	C942	E-4	R927	B-3	R965	E-4
IC905	D-4	CL925	D-1	**Capacitor**		C943	E-4	R928	C-2	R966	E-4
Transistor		CL926	D-2	C901	B-3	C944	C-4	R929	C-2	R967	E-4
Q901	E-3	CL927	E-1	C902	C-2	C945	B-4	R930	D-1	R968	E-4
Q902	C-4	CL928	C-4	C903	B-2	C946	B-4	R931	D-1	R969	E-4
Q903	A-3	CL929	D-1	C905	C-3	C947	C-3	R932	D-1	R970	C-4
Q904	D-2	CL930	C-4	C906	A-2	C948	C-4	R933	D-1	R971	E-4
Q905	D-2	CL931	E-4	C907	D-2	C949	B-3	R934	C-2	R972	B-4
Q906	A-3	TL901	E-4	C908	C-2	C950	B-3	R935	C-2	R973	E-4
Q907	C-2	TL902	A-1	C909	B-1	C952	B-4	R936	C-1	R974	E-4
Q908	C-3	TL903	F-4	C910	A-2	**Resistor**		R937	C-1	R975	C-4
Transistor & Resistor		**Connector**		C911	A-2	R901	C-1	R938	E-1	R976	C-4
QR901	C-4	FP901	A-4	C912	A-2	R902	C-1	R940	B-3	R977	C-4
QR902	E-4	FP903	D-3	C913	A-2	R903	C-1	R941	B-3	R978	C-3
QR903	C-4	**Diode**		C914	C-2	R904	B-1	R942	B-1	R979	C-4
QR904	E-2	D901	D-2	C915	D-2	R905	B-1	R943	B-1	R985	C-1
Test Point		D902	E-4	C916	C-1	R906	D-3	R944	D-2	R986	C-1
CL901	A-2	D903	C-4	C917	C-1	R907	B-1	R945	D-2	R989	C-4
CL903	A-2	D904	D-4	C918	C-1	R908	C-1	R946	D-2	**Wire**	
CL905	C-1	D905	B-1	C919	A-1	R909	C-1	R947	D-2	W901	B-4
CL906	C-1	D906	B-1	C923	E-3	R910	C-2	R951	C-4	W902	B-3
CL908	C-1	D907	C-4	C925	A-2	R911	C-2	R952	B-4	**Jumper**	
CL911	A-2	D908	B-3	C930	D-1	R912	B-3	R953	D-4	JA1	E-2
CL913	A-2	D909	B-4	C931	D-1	R913	B-3	R954	D-4	JA2	E-2
CL914	C-2	D910	E-2	C932	D-1	R914	B-3	R955	D-4	JA3	E-2
CL915	D-1	**Coil**		C933	A-3	R918	D-1	R956	D-4		
CL916	D-1	L901	D-2	C934	D-1	R919	C-2	R957	D-4		
CL917	D-1	L902	B-2	C935	D-1	R920	A-3	R958	D-4		
CL918	D-2	L903	D-2	C936	A-2	R921	E-3	R959	C-4		
CL919	D-4	L904	D-2	C937	B-4	R922	E-2	R960	D-4		
CL920	D-4	L905	C-3	C938	D-4	R923	C-3	R961	D-4		

ADDRESS INFORMATION

1. Note when inserting Flexible Cable

There are five flexible cables, which have two sets of contacts on each cable, see the figure below. When inserting these cables into the connector, make sure that the cables are fully inserted, if not they may damage the connector.



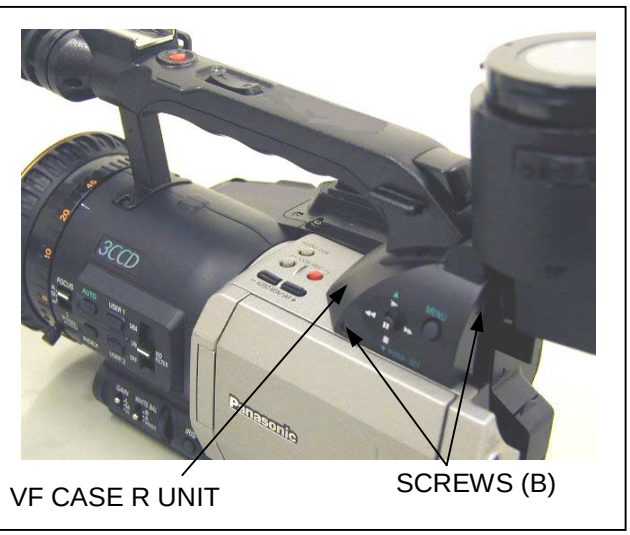
P52 on EVR CONNECT C.B.A.
P4604 and P4606 on R_SIDE C.B.A.
P1004 and P1006 on CAMERA C.B.A.

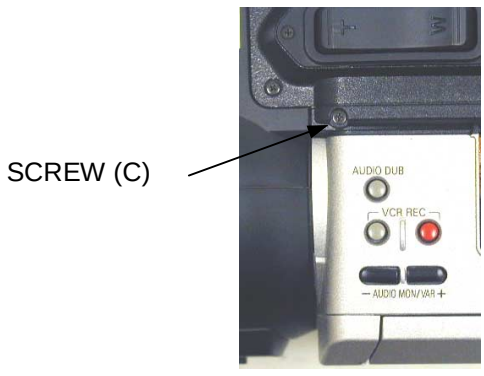
CCD ←→ P1004
LENS ←→ P1005
LCD Unit ←→ P4606
P52 (EVR CONNECT C.B.A.) ←→ P4604 (R_SIDE C.B.A.)

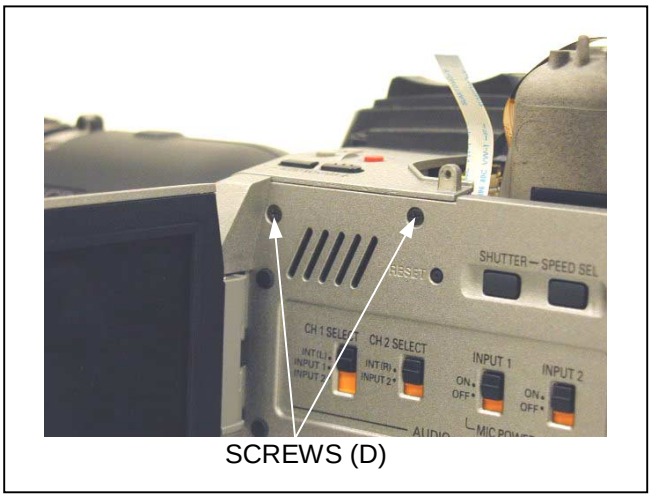
When P1004 flexible cable is not making correct contact, the camera's picture will not be seen.
When P1005 flexible cable is not making correct contact, the LENS will not operate.
When P4606 flexible cable is not making correct contact, the LCD Panel will not operate.
When P52 or P4604 flexible cable is not making correct contact, the VTR will not operate.
If any of the above symptoms occur after you assemble the AG-DVX100, please check the indicated connector.

2. Removal of Top Panel Unit

1. Unscrew the 2 screws (A) and remove the VF CASE (L).
2. Unscrew the 2 screws (B) and disconnect a connector P610 on MENU C.B.A., then remove the VF CASE R UNIT.
3. Unscrew 3 screws (C) and (D).
4. Disconnect a connector P553 on VC CONNECT C.B.A. and remove the Top Panel Unit.







SCREWS (D)

P553

TOP PANEL UNIT

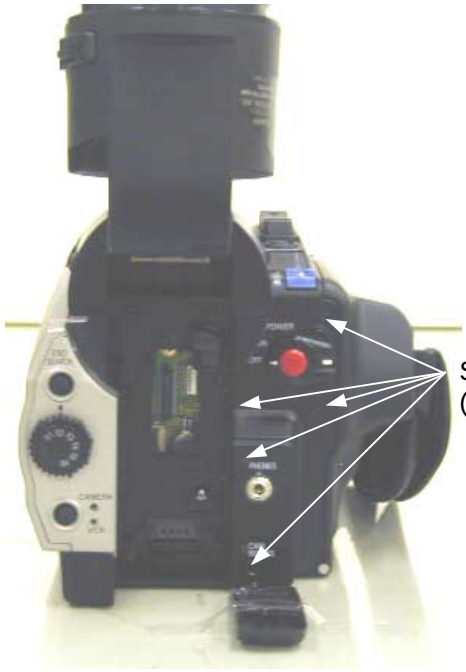
3. Removal of Grip Cover Unit

1. Remove the Top Panel Unit.
2. Unscrew the 4 screws (A) and unscrew the 5 screws (B).
3. Disconnect a connector (A) on VTR C.B.A. and remove the Grip Cover Unit.

SCREWS (A)

GRIP COVER UNIT

SCREWS (A)


SCREWS (B)

CONNECTOR (A)

4. Removal of Mechanism Unit

1. Remove the Grip Cover Unit.
2. Disconnect 2 connectors (A) and (B) on VTR C.B.A.
3. Unscrew the 2 screws (B).
4. Disconnect a connectors (C) on VTR C.B.A.
5. Unscrew the 4 screws (A) and remove the Mechanism Unit.

NOTE:

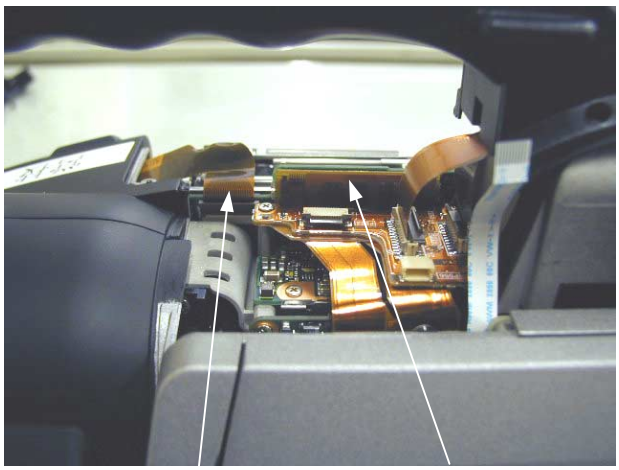
When remove the Mechanism Unit, the connector (D) which combines the VTR C.B.A with Mechanism Unit is disconnected. Also the connector (E) and (F) which combines the VTR C.B.A with Mechanism Unit is disconnected.

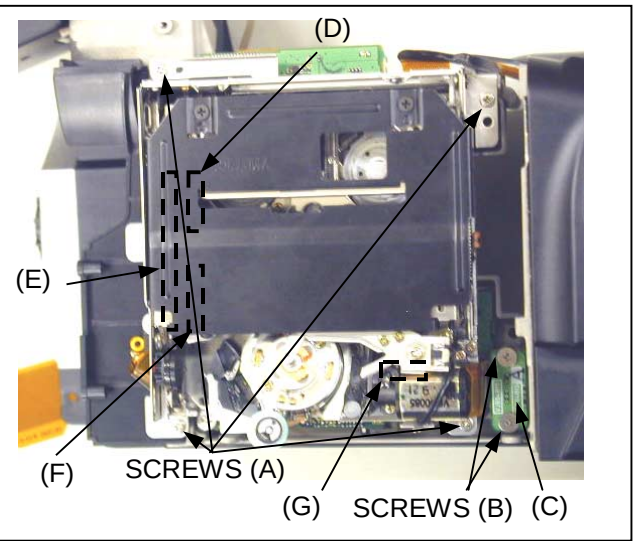
Check the connector has been connected securely when the Power Supply Unit is installed.

6. Disconnect a connectors (G) on VTR C.B.A.

NOTE:

When installing a mechanism unit, make the condition which closed the lid of the connector (B) on the VTR C.B.A.



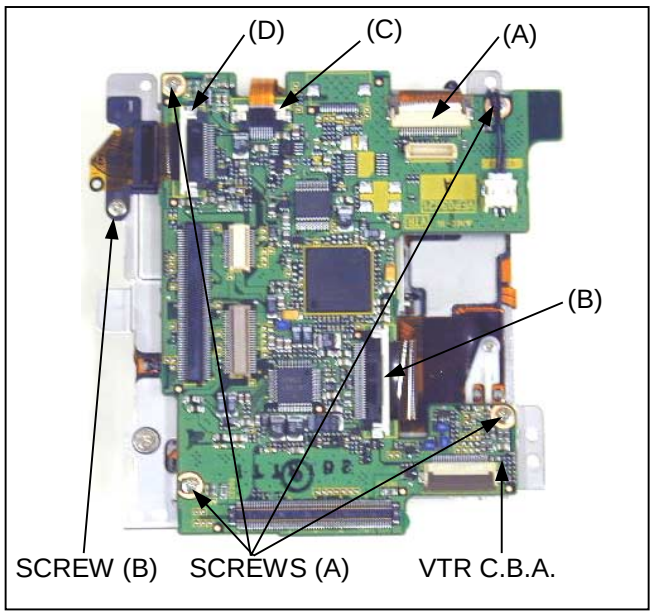


5. Removal of VTR C.B.A.

1. Remove the Mechanism Unit.
2. Disconnect 4 connectors (A), (B), (C) and (D) on VTR C.B.A.
3. Unscrew the 4 screws (A) and remove the VTR C.B.A..

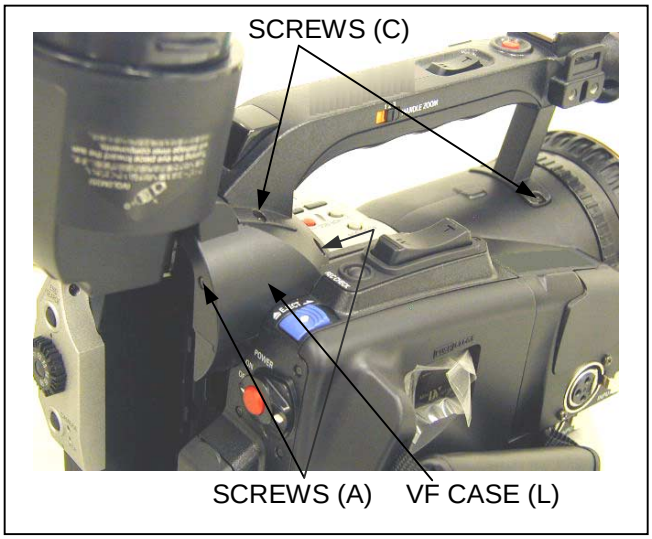
NOTE:

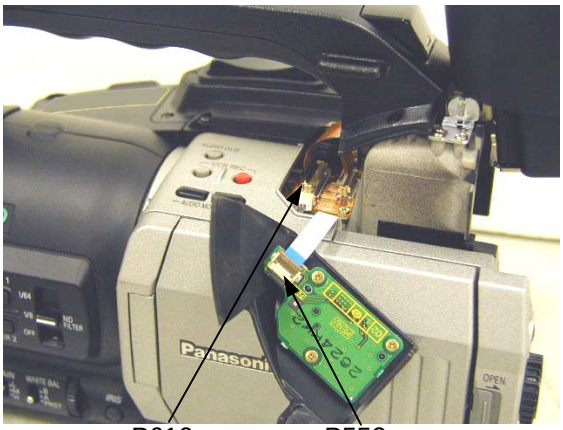
When inserting a connector (D) the connector is easy to insert when removing screw (B).



6. Removal of Handle Unit

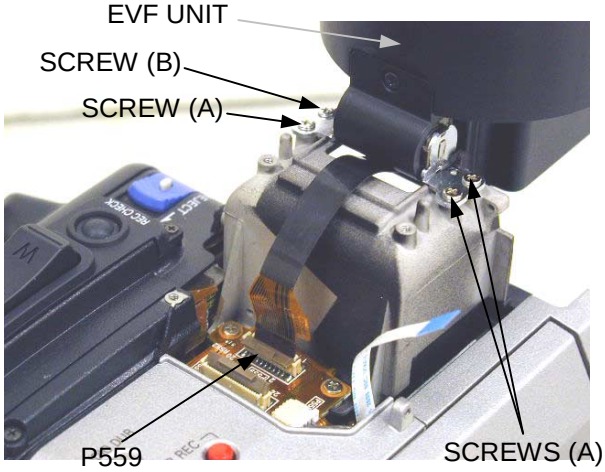
1. Unscrew the 2 screws (A) and remove the VF CASE (L).
2. Unscrew the 2 screws (B) and disconnect a connector P610 on MENU C.B.A., then remove the VF CASE R UNIT.
3. Disconnect a connector P552 on VC CONNECT C.B.A..
4. Unscrew the 4 screws (C) and remove the Handle Unit.





7. Removal of EVF Unit

1. Remove the Handle Unit.
2. Unscrew the 3 screws (A) and disconnect a connector P559 on VC CONNECT C.B.A..
3. Make the condition which lift up the EVF Unit as shown figure and unscrew the 1 screw (B), then remove the EVF Unit.

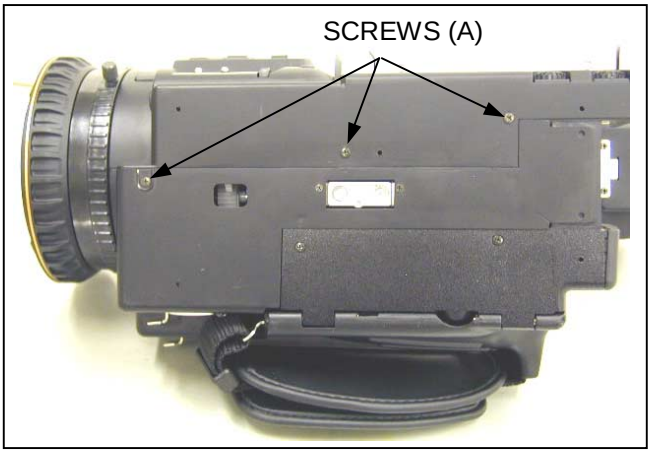


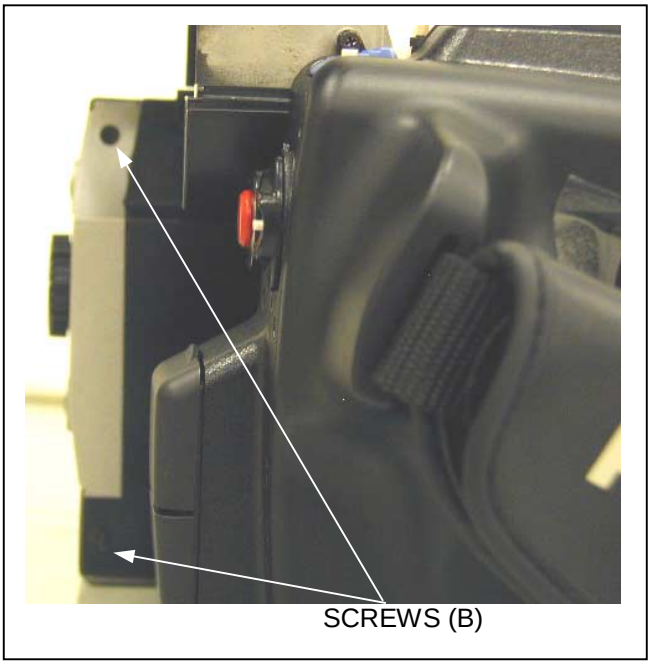
8. Removal of Side Case (R) Unit

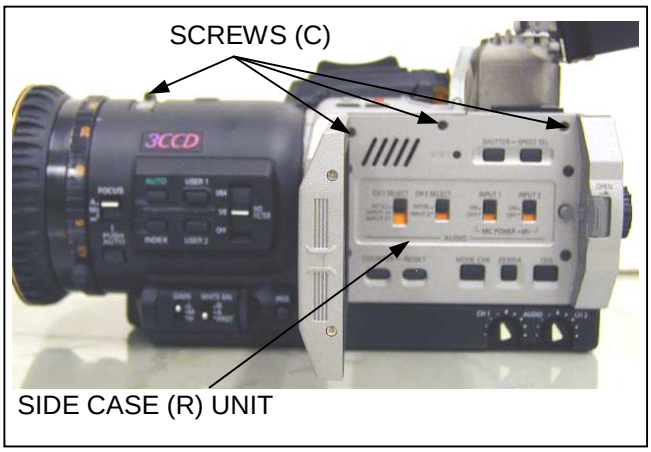
1. Remove the Handle Unit.
2. Unscrew the 5 screws (A) and (B).
3. Unscrew the 4 screws (C).
4. Disconnect a connector P556 on VC CONNECT C.B.A..
5. Disconnect a connector (A) on CAMERA C.B.A..
6. Disconnect a connector P4603 on R-SIDE C.B.A..
7. Disconnect a connector P4604 on R-SIDE C.B.A. and remove the Side Case (R) Unit.

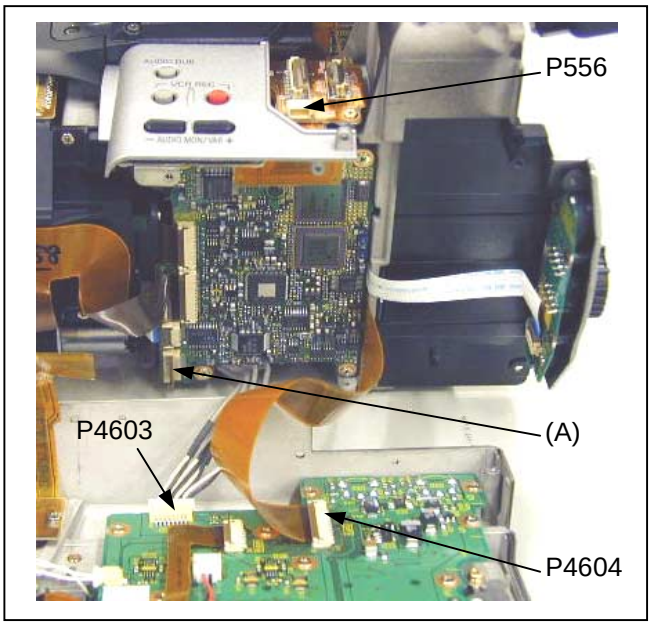
NOTE:

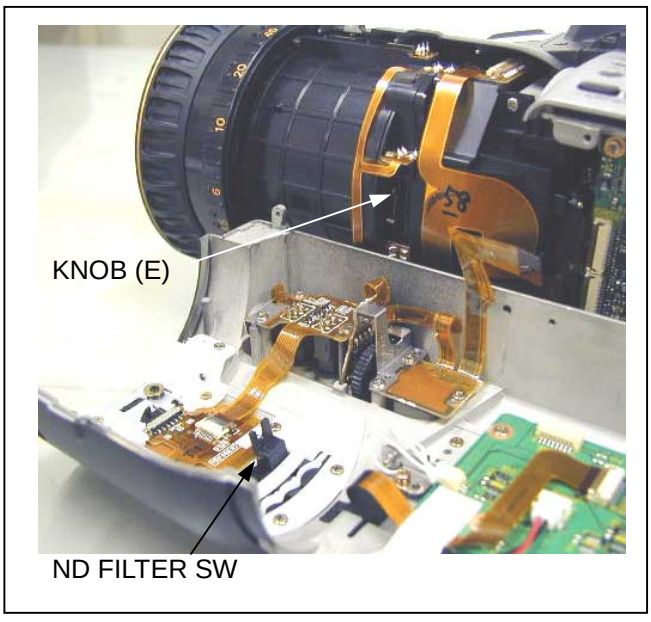
When installing a Side Case (R) unit, make the condition that ND FILTER SW is inserted in the knob(E) of part of ND filter on the lens unit (As for the figure, ND FILTER SW shows the condition of OFF).





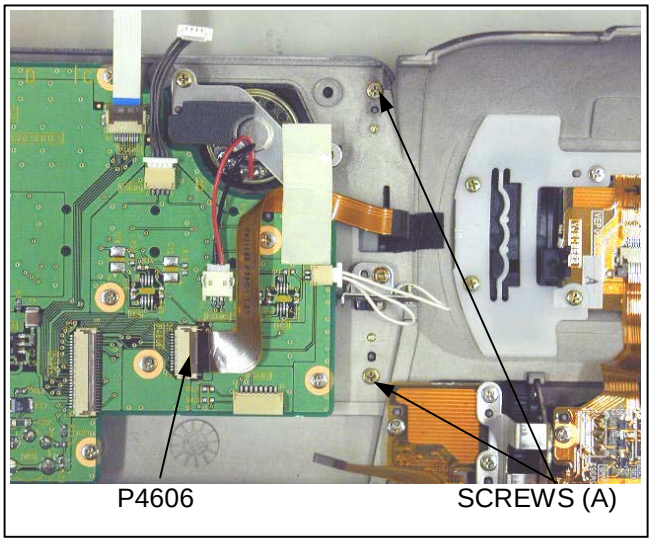


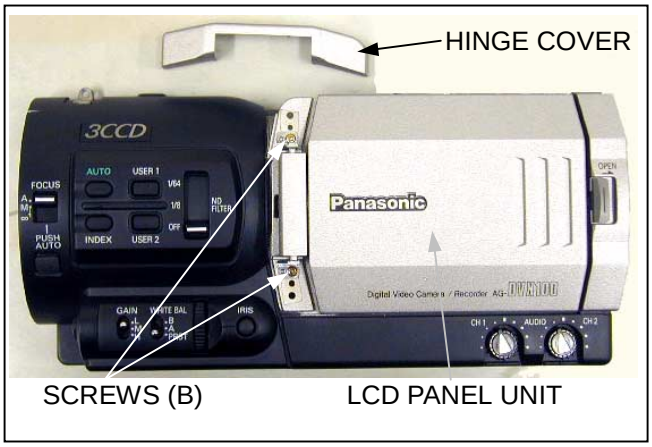




9. Removal of LCD Unit

1. Remove the Handle Unit.
2. Remove the Side Case (R) Unit.
3. Unscrew the 2 screws (A) and remove the HINGE COVER.
4. Disconnect a connector P4606 on R-SIDE C.B.A..
5. Unscrew the 2 screws (B) and remove the LCD Unit.





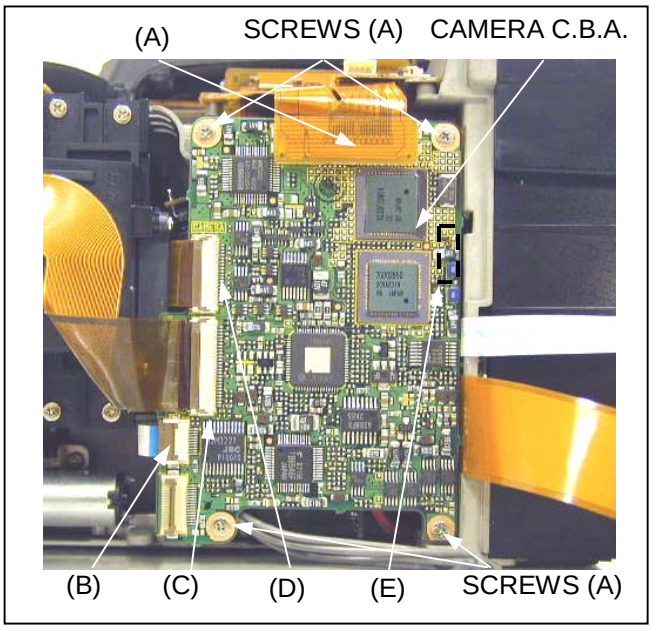
10. Removal of CAMERA C.B.A.

1. Remove the Handle Unit.
2. Remove the Top Panel Unit.
3. Remove the Side Case (R) Unit.
4. Disconnect 4 connectors (A), (B), (C) and (D) on R-SIDE C.B.A..
5. Unscrew the 4 screws (A) and remove the CAMERA C.B.A..

NOTE:

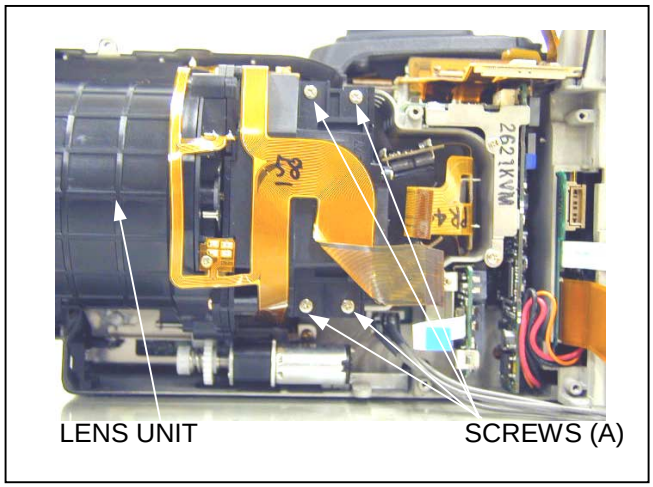
When remove the CANERA C.B.A., the connector (E) which connected between CAMERA and EVR CONNECT C.B.A. is disconnected.

Check the connector has been connected securely when the CAMERA C.B.A. is installed.



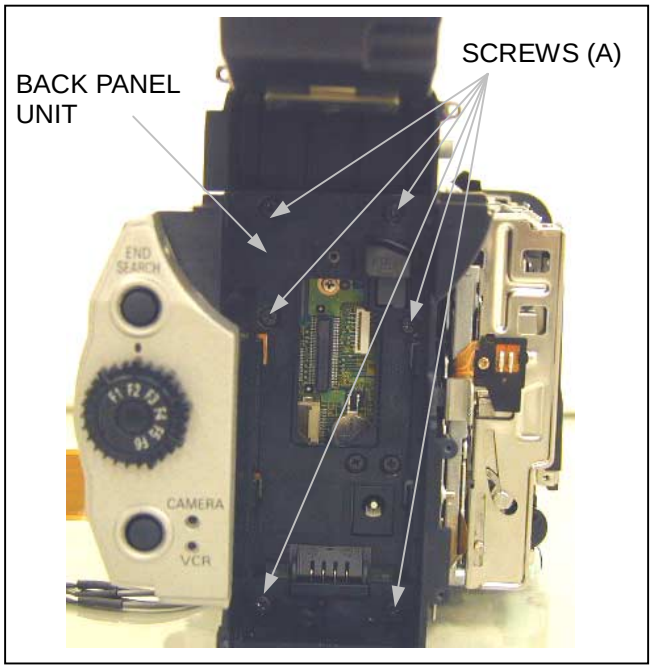
11. Removal of Lens Unit

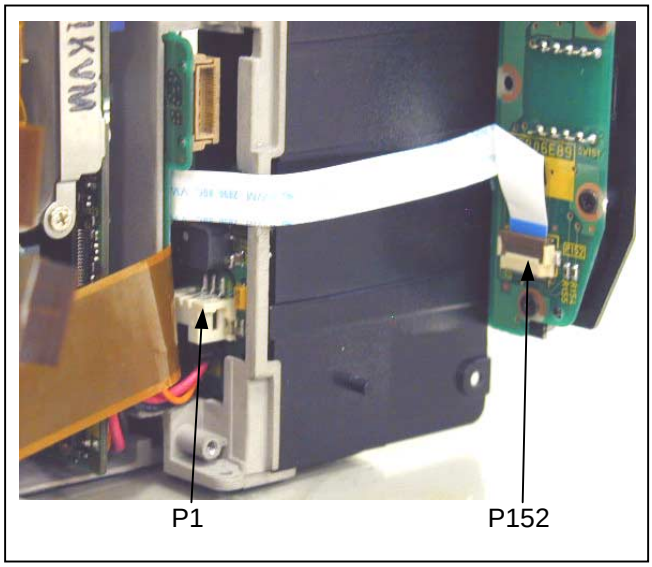
1. Remove the Handle Unit.
2. Remove the Top Panel Unit.
3. Remove the Side Case (R) Unit.
4. Remove the CAMERA C.B.A..
5. Unscrew the 4 screws (A) and remove the CAMERA C.B.A..



12. Removal of Back Panel Unit

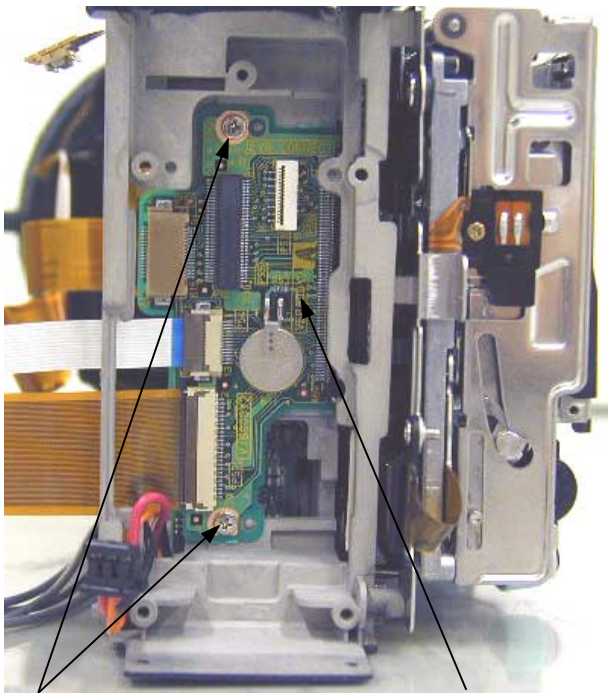
1. Remove the Grip Cover Unit.
2. Remove the Handle Unit.
3. Remove the Top Panel Unit.
4. Remove the Side Case (R) Unit.
5. Remove the CAMERA C.B.A..
6. Disconnect a connector P152 on MODE SW C.B.A..
7. Unscrew the 6 screws (A).
8. Disconnect a connector P1 on BATTERY C.B.A.. and remove the Back Panel unit.





13. Removal of EVR CONNECT C.B.A.

1. Remove the Grip Cover Unit.
2. Remove the Handle Unit.
3. Remove the Top Panel Unit.
4. Remove the Side Case (R) Unit.
5. Remove the CAMERA C.B.A..
6. Remove the Back Panel Unit.
7. Unscrew the 2 screws (A) and remove the EVR CONNECT C.B.A..



ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP03G21A	VTR C.B.A.	1	(RTL)
■	VEP001A4A	VTR SUB C.B.A.	1	(RTL)FOR VEP03G21A
■ E2	VEP23571A	CAMERA C.B.A.	1	(RTL)
■	VEP001A7A	CAMERA SUB 1 C.B.A.	1	(RTL)FOR VEP23571A
■	VEP001A7B	CAMERA SUB 2 C.B.A.	1	(RTL)FOR VEP23571A
■	VEP001A7C	CAMERA SUB 3 C.B.A.	1	(RTL)FOR VEP23571A
■ E3	VEP01914A	POWER C.B.A.	1	(RTL)
■	VEP001A6A	POWER SUB C.B.A.	1	(RTL)FOR VEP01914A
■ E4	VEP01922A	POWER 2 C.B.A.	1	(RTL)
■ E5	VEP05395A	H/R AMP C.B.A.	1	(RTL)
■ E6	VEP04817A	R SIDE C.B.A.	1	(RTL)
■ E7	VEP06E92A	CAMERA OP1 C.B.A.	1	(RTL)
■ E8	VEP06E93A	CAMERA OP2 C.B.A.	1	(RTL)
■ E9	VEP28272B	EVF A C.B.A.	1	(RTL)
■ E10	VEP28275B	EVF B C.B.A.	1	(RTL)
■ E11	VEP000Z0A	MENU C.B.A.	1	(RTL)
■ E12	VEP06E95A	HANDLE 1 C.B.A.	1	(RTL)
■ E13	VEP06F04A	HANDLE 2 C.B.A.	1	(RTL)
■ E14	VEP04828A	MIC C.B.A.	1	(RTL)
■ E15	VEP06E94A	F TALLY C.B.A.	1	(RTL)
■ E16	VEP000Y2A	EVR CONNECT	1	(RTL)
■ E17	VEP000Y3A	VC CONNECT C.B.A.	1	(RTL)
■ E18	VEP000Y4A	LCD OPEN SW C.B.A.	1	(RTL)
■ E19	VEP000Y6A	REAR JACK CONNECT C.B.A.	1	(RTL)
■ E20	VEP000Y7A	EJECT C.B.A.	1	(RTL)
■ E21	VEP04819A	REAR JACK C.B.A.	1	(RTL)
■ E22	VEP06E96A	POWER SW C.B.A.	1	(RTL)
■ E23	VEP06E90A	ZOOM SW C.B.A.	1	(RTL)
■ E24	VEP000Y9A	TOP OP C.B.A.	1	(RTL)
■ E25	VEP22331A	GYRO C.B.A.	1	(RTL)
■ E26	VEP04816A	SIDE JACK C.B.A.	1	(RTL)
■ E27	VEP04815A	EXT MIC CH2 C.B.A.	1	(RTL)
■ E28	VEP04825A	EXT MIC CH1 C.B.A.	1	(RTL)
■ E29	VEP06E89A	MODE SW C.B.A.	1	(RTL)
■ E30	VEP01923A	DC IN C.B.A.	1	(RTL)
■ E31	VEP01915A	BATTERY C.B.A.	1	(RTL)
■ E32	VEP26257A	MONITOR C.B.A.	1	(RTL)
■	VEP06E29A	HALL SENSOR FLEX CARD CBA	1	(RTL)FOR VEP26257A

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP03G21A	VTR C.B.A.	1	(RTL)
■	VEP001A4A	VTR SUB C.B.A.	1	(RTL)FOR VEP03G21
C1-10	F1L1E1060018	C.CAPACITOR CH 25V 10U	10	FOR VEP001A4A
C600	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C602	ECUX1H680JCQ	C.CAPACITOR CH 50V 68P	1	
C604	F3F1A226A008	T.CAPACITOR CH 10V 22U	1	
C605	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C606,07	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C610	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C611	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C612	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C614	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C616	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C617	F1J1C105A091	C.CAPACITOR CH 16V 1U	1	
C618-20	F1H0J474A002	T.CAPACITOR CH6.3V 0.47U	3	
C625	F1H0J474A002	T.CAPACITOR CH6.3V 0.47U	1	
C626	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C627	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C628	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C629	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C630	ECJ0EB1C682K	C.CAPACITOR CH 16V 6800P	1	
C631	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C633	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C666	ECJ3YB1C225K	C.CAPACITOR CH 16V 2.2M	1	
C672	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	1	
C2001	F1J0J106A014	T.CAPACITOR CH6.3V 10U	1	
C2002	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C2004-08	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	5	
C2009	F1G1H6R00004	C.CAPACITOR CH 50V 6P	1	
C2010	F1G1H5R00004	C.CAPACITOR CH 50V 5P	1	
C2011-14	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	4	
C2015	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C2017	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2021	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2022	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C2024	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2028	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2029	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2030	F1G1H100A448	C.CAPACITOR CH 50V 10P	1	
C2031	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C2032	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2033	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C2034	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C2035	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2037	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C2038	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2039	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2041	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2043	F1G1H100A448	C.CAPACITOR CH 50V 10P	1	
C2044	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2048	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C2050	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2052	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C2055	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2101	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C2201	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2202,03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C2204	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C2205,06	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C2207	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2208	ECJ0EC1H150J	C.CAPACITOR CH 50V 15P	1	
C2209	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2210	ECUX1A564KBN	C.CAPACITOR CH 10V 0.56U	1	
C2211	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2212	ECUX1A564KBN	C.CAPACITOR CH 10V 0.56U	1	
C2213	ECUX1E223KBV	C.CAPACITOR CH 25V 0.023U	1	
C2214	ECUX1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C2215	ECST0JY475Z	T.CAPACITOR CH6.3V 4.7U	1	
C2216-18	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C2219	ECJ0EC1H270J	C.CAPACITOR CH 50V 27P	1	
C2220	ECJ0EB1E332K	C.CAPACITOR CH 25V 3300P	1	
C2221	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2222	ECUX1E273KBV	C.CAPACITOR CH 25V 0.027U	1	
C2223	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C2225	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2226	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C2227	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2228-30	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C2231,32	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C2233	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2234	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2235,36	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C2237	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C2238	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C2239	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C2240,41	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	2	
C2242	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C2243	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2244-48	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	5	
C3001	F3E0J106A005	T.CAPACITOR CH6.3V 10U	1	
C3003	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3004	F3F1A226A008	T.CAPACITOR CH 10V 22U	1	
C3005	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3006	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3007	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3008	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C3009,10	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C3012	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3014	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3015	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3016	F3F0J2260001	T.CAPACITOR CH6.3V 22U	1	
C3017-27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	11	
C3029-33	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C3034	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C3035,36	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C3037	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3038	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C3039	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3041	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3043	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3044	F3E0G1060002	T.CAPACITOR CH 4V 10U	1	
C3045	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3046-49	F1H0J105A002	C.CAPACITOR CH6.3V 1U	4	
C3051	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3052	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3053	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3054	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3061	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C3062	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3063	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3064-67	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C3101	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3102	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3103	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C3104	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3105,06	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C3107	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3108	F3F1A226A008	T.CAPACITOR CH 10V 22U	1	
C3109	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3110	F3H1A1070006	T.CAPACITOR CH 10V 100U	1	
C3111	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3112	ECUX0J225KBN	C.CAPACITOR CH6.3V 2.2U	1	
C3113	F1J0J106A014	T.CAPACITOR CH6.3V 10U	1	
C3114	F3E0G1060002	T.CAPACITOR CH 4V 10U	1	
C3115	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3116	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3117	ECUX0J225KBN	C.CAPACITOR CH6.3V 2.2U	1	
C3119	F3H0J1070005	T.CAPACITOR CH6.3V 100U	1	
C3120	ECST0JY226	T.CAPACITOR CH6.3V 22U	1	
C3121	F3E0G1060002	T.CAPACITOR CH 4V 10U	1	
C3122	ECST0JY226	T.CAPACITOR CH6.3V 22U	1	
C3125	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3126	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3127	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3128	ECUX0J225KBN	C.CAPACITOR CH6.3V 2.2U	1	
C3129	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3131	ECUX0J225KBN	C.CAPACITOR CH6.3V 2.2U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3132	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3134	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3136,37	F1H0J105A002	C.CAPACITOR CH6.3V 1U	2	
C3138	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C3139	F3E0G1060002	T.CAPACITOR CH 4V 10U	1	
C3140,41	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C3142	F3F1A226A008	T.CAPACITOR CH 10V 10U	1	
C3143	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3202	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3203-07	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C3209	F1J0J106A014	T.CAPACITOR CH6.3V 10U	1	
C3211	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3215	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3218	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3220	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C3221-23	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C3226	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3227	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3229	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3252	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3253	F1G1H2210001	C.CAPACITOR CH 50V 220P	1	
C3254	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3255	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3256	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3257	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3259	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3501-03	F1J0J475A006	C.CAPACITOR CH6.3V 1U	3	
C3504,05	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C3506	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3507,08	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C3509,10	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	2	
C3511	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C3512,13	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	2	
C3514,15	F1H0J105A002	C.CAPACITOR CH6.3V 1U	2	
C3516	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3517,18	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C3519	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3521-23	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	3	
C3551	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3552,53	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	2	
C3554	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3555	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3556	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3557	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3558-60	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	3	
C3561	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3562,63	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	2	
C3564	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3566	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3568	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3569	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C6503	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
D601	MA338	DIODE	1	
D602	MA2J11100L	DIODE	1	
D2001-05	MA2SD2400L	DIODE	5	
D2007	MA2SD2400L	DIODE	1	
D2009	MA2SD2400L	DIODE	1	
D2010	MA2J11100L	DIODE	1	
D2012	MA2J11100L	DIODE	1	
D2013	MA2SD2400L	DIODE	1	
D2014	MA110	DIODE	1	
D2201	MA110	DIODE	1	
D2501	MA2SD2400L	DIODE	1	
D3101	MA2S11100L	DIODE	1	
FP2201	K1MN22B00029	CONNECTOR	1	
FP2202	K1MN09B00027	CONNECTOR	1	
FP2203	K1MN30B00037	CONNECTOR	1	
FP2204	K1KA08A00267	CONNECTOR (MALE)	1	
FP2208	K1MN22B00034	CONNECTOR	1	
FP5001	VJS3801D024	CONNECTOR (FEMALE)	1	
IC601	C0HBA0000094	IC	1	
IC602	C0JBAA000115	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC2001	VSI3842D	IC	1	
IC2002	C0EBK0000063	IC	1	
IC2003	C1ZBZ0001483	IC	1	
IC2004	C0BBAA000008	IC	1	
IC2005	C0BBBA000030	IC	1	
IC2007	C0JBAE000087	IC	1	
IC2008	VSI3982C	IC	1	
IC2009	C0FBBD000081	IC	1	
IC2011	C0CBAAA00012	IC	1	
IC2012	C0EBD0000146	IC	1	
IC2013	C0CBCAC00001	IC	1	
IC2014	C0CBABC00104	IC	1	
IC2015	C0JBAA000102	IC	1	
IC2201	TB6519AF	IC	1	
IC2202,03	UN224	TRANSISTOR-RESISTOR	2	
IC2204	C0JBAA000287	IC	1	
IC2205	TC7S86FU	IC	1	
IC2206	C0GBE0000007	IC	1	
IC2207	TA75S393F	IC	1	
IC2208	TC75W54FU	IC	1	
IC2209	C0JBAA000182	IC	1	
IC3001	C1AB00001130	IC	1	
IC3002	AN2903FJQ-V	IC	1	
IC3004	C0FBZH000013	IC	1	
IC3005	C0ZBZ0000363	IC	1	
IC3006	C0JBAA000102	IC	1	
IC3007	TC7SZ00F	IC	1	
IC3201	C1AB00001132	IC	1	
IC3202	C1AB00001612	IC	1	
IC3501	C1AB00001280	IC	1	
IC3502	BA10324AF	IC	1	
IC3503,04	C1AB00000647	IC	2	
L601	VLQ0426J3R9	COIL 3.9UH	1	G1C3R9J00004
L602,03	G1C100K00019	COIL 10UH	2	
L604	VLQ0807K100	COIL 10UH	1	G1C100K00024
L605,06	VLQ0807K220	COIL 22UH	2	G1C220K00016
L2003	G1C100K00019	COIL 10UH	1	
L3002	G1C100K00019	COIL 10UH	1	
L3006,07	G1C100K00019	COIL 10UH	2	
L3009	G1C100K00019	COIL 10UH	1	
L3011-14	G1C100K00019	COIL 10UH	4	
L3015	G1C101KA0031	COIL 100UH	1	
L3017	G1C100K00025	COIL 10UH	1	
L3021-23	G1C100K00019	COIL 10UH	3	
L3201	G1C100K00019	COIL 10UH	1	
L3501	VLQ0807K100	COIL 10UH	1	G1C100K00024
L3505-10	VLQ0426J330	COIL 33UH	6	G1C330J00005
LB2002	J0JBC0000012	FILTER	1	
LB3001-04	VLF1315A102	FILTER	4	J0JHC0000015
LB3006	VLF1315A102	FILTER	1	J0JHC0000015
LB3101-03	J0JBC0000042	FILTER	3	
LB3201	VLF1315A102	FILTER	1	J0JHC0000015
LB3205	VLF1315A102	FILTER	1	J0JHC0000015
LB3207	VLF1315A102	FILTER	1	J0JHC0000015
LB3502,03	J0JBC0000012	FILTER	2	
P1001	K1KA50A00113	CONNECTOR (MALE)	1	
P1002	VJS3846A030	CONNECTOR (FEMALE)	1	
P2001	K1KAC0A00011	CONNECTOR (MALE)	1	
P2002	K1KBC0A00048	CONNECTOR (FEMALE)	1	
P2003	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
P2207	K1KB20A00021	CONNECTOR (FEMALE)	1	
P2209	VJP3658D030	CONNECTOR (MALE)	1	K1KA30A00090
Q601,02	B1ADGD000005	TRANSISTOR	2	
Q603	XP1501	TRANSISTOR-RESISTOR	1	
Q605	B1ADGD000005	TRANSISTOR	1	
Q608	B1ADGD000005	TRANSISTOR	1	
Q611	2SD2216J0L	TRANSISTOR	1	
Q2007	B1ADGD000005	TRANSISTOR	1	
Q2012	2SD182000L	TRANSISTOR	1	
Q2013	2SB1218AHL	TRANSISTOR	1	
Q2201	2SB1462JRS	TRANSISTOR	1	
Q2202	2SD2216J0L	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q3101-03	2SD1979	TRANSISTOR	3	
Q3501	B1ADGD000005	TRANSISTOR	1	
Q3503,04	2SB1218AHL	TRANSISTOR	2	
Q3505	2SD1819ALL	TRANSISTOR	1	
QR602	XP0431400L	TRANSISTOR	1	
QR604	B1GBCFLL0022	TRANSISTOR	1	
QR2001	UNR511500L	TRANSISTOR	1	
QR2002	UN2130X	TRANSISTOR-RESISTOR	1	
QR2004	B1GBCFGJ0007	TRANSISTOR	1	
QR2005	B1GHCFJA0003	TRANSISTOR	1	
QR2006	B1GBCFNL0007	TRANSISTOR	1	
QR2010	B1GHCFJA0003	TRANSISTOR	1	
QR2011	B1GBCFJN0017	TRANSISTOR	1	
QR2012	B1GDCFJA0006	TRANSISTOR	1	
QR2201	UN9213	TRANSISTOR-RESISTOR	1	
QR2202	UNR9113J0L	TRANSISTOR	1	
QR2203	UN9213	TRANSISTOR-RESISTOR	1	
QR2204	UNR9113J0L	TRANSISTOR	1	
QR3101	B1GDCFLL0017	TRANSISTOR	1	
QR3102	UN9213	TRANSISTOR-RESISTOR	1	
QR3502	UN9213	TRANSISTOR-RESISTOR	1	
R601	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R602-05	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R606	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R608	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R609	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R610,11	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R612	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R613	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R614	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R615	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R616	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R617	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R618,19	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R621	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R622	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R623	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R624,25	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R626	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R627	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R628	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R629	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R630	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R631	ERJ2RHD563	M.RESISTOR CH 1/16W 56K	1	
R632	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R633	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R634	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R635	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R636	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R638-40	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	3	
R642	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R643	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R644	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R647	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R648-50	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R651	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R657	ERJ2GEJ274	M.RESISTOR CH 1/16W 270K	1	
R2001	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R2002	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2003	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2004	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2005,06	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R2007	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2008,09	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2010	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2011	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2012	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2013	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2014	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2015	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R2016	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2017	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R2018	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2019,20	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2021	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R2022	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2023,24	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2025	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2027	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R2028	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2029	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	1	
R2030	ERJ2GEJ274	M.RESISTOR CH 1/16W 270K	1	
R2031	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2032	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
R2033	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2034	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2035	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2036,37	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2038	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R2039	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2040	ERJ8GEYG330	M.RESISTOR CH 1/8W 33	1	
R2041,42	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2044	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2045	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2048,49	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2050	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R2051-53	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R2054	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R2055	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2056,57	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2058	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R2059	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2060	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2061	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2062	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2063	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2064,65	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R2066	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2068	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2069	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2072	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2073	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2075	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2077,78	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2081	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2082	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R2083	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2084	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2085	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2086	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	1	
R2087	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2088-90	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R2091	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2092	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R2093	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2094	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R2097	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R2098	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2099,00	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2101-04	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	4	
R2105	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2106-08	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R2109,10	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2111	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2112,13	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	
R2114	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2115	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R2116	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R2117	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2118,19	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R2120	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2123	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2124,25	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R2126,27	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	2	
R2129	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R2131	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2132	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R2133	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2136	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R2137	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R2138	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R2139	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R2142	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2143	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2146	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2149	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2161	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2162	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2164	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2165,66	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2167	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2168	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2169	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2170	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R2171	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2172	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2173	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2174	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2175,76	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2177	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2178	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2182	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2184	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2185	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R2187	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R2188	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	1	
R2189	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2193	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2194	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2195	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R2196	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2197	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2198	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2203,04	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R2206	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2207	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R2209	ERJ2GEJ122	M.RESISTOR CH 1/16W 1.2K	1	
R2210,11	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2212	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2213	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R2214	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2215	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2216	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R2217,18	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R2219	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2220	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2221	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2222	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2223	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R2224	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2225	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R2226	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2227	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R2228	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2229	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2230	ERJ8GEYJR33	M.RESISTOR CH 1/8W 0.33	1	
R2231	ERJ8GEYJR47	M.RESISTOR CH 1/8W 0.47	1	
R2232,33	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	
R2234	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2235	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R2236	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	1	
R2237	ERJ2GEJ682	M.RESISTOR CH 1/16W 6.8K	1	
R2238	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	1	
R2239	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R2240	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2241	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2242	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2243	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2244	ERJ8GEYJR27	M.RESISTOR CH 1/8W 0.27	1	
R2245	ERJ2RHD471	M.RESISTOR CH 1/16W 470	1	
R2246	EXBV8V331J	COMBI.R-R 330	1	
R2247,48	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	2	
R2249	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3001	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3002	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3004	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3005	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R3006	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3007	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3008	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3009	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3011-13	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R3014	ERJ2GEJ684	M.RESISTOR CH 1/16W 680K	1	
R3015	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R3016	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3017	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3019,20	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	2	
R3021	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R3022-24	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R3030,31	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R3034	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3035	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R3037	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R3041	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3061,62	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R3101	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3102	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R3103	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
R3104	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R3105,06	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R3107	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3108	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R3109	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3110	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R3111	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
R3112	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3113	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R3114	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3115	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3116	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R3117	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	1	
R3118,19	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R3120	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3122	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3124	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R3125	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3126,27	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R3128	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R3129	ERJ2GEJ680	M.RESISTOR CH 1/16W 68	1	
R3130	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3131	ERJ2GEJ750	M.RESISTOR CH 1/16W 75	1	
R3132	ERJ2GEJ680	M.RESISTOR CH 1/16W 68	1	
R3133	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3136	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R3137	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3138	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R3149	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3151	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3152	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3201	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3202	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3203	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R3204	ERJ2RHD181	M.RESISTOR CH 1/16W 180	1	
R3205	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R3209	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3210	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3211,12	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	2	
R3213	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R3215	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3216	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R3217	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3218	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3229	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3251-54	ERJ2RKD560	M.RESISTOR CH 1/16W 56	4	
R3255,56	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R3257	ERJ2RHD622	M.RESISTOR CH 1/16W 6.2K	1	
R3258	ERJ2RHD181	M.RESISTOR CH 1/16W 180	1	
R3259	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3403	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3432	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3497	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3498	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3501	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3503	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R3504	ERJ2RHD181	M.RESISTOR CH 1/16W 180	1	
R3505,06	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	2	
R3507	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R3508	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3509	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3515	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R3551	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3552	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3553,54	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R3555	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3556	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3557,58	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	2	
R3560	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3561,62	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R3563	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3564	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	1	
R3565	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3568	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R3580	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3591	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3592	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R3593	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3594	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R5092-95	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R6515,16	ERJ3RBD271	M.RESISTOR CH 1/16W 270	2	
R6518	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R6521-23	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	D0YDR0000005
R9005	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R9007-14	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	8	
R9016-19	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R9021,22	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R9024-28	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
W3401-18	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	18	
X2001	H0J270500024	CRYSTAL OSCILLATOR	1	
X2002	H0J327200051	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMZ3327	INSULATION SHEET	1	FOR VEP001A4A
■ E2	VEP23571A	CAMERA C.B.A.	1	(RTL)
■	VEP001A7A	CAMERA SUB 1 C.B.A.	1	(RTL)FOR VEP23571A
■	VEP001A7B	CAMERA SUB 2 C.B.A.	1	(RTL)FOR VEP23571A
■	VEP001A7C	CAMERA SUB 3 C.B.A.	1	(RTL)FOR VEP23571A
C1	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7A
C1	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7B
C2	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7A
C2	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7B
C2	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7C
C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	FOR VEP001A7A
C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	FOR VEP001A7B
C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	FOR VEP001A7C
C10-12	ECST1AY106Z	T.CAPACITOR CH 10V 10U	3	
C13	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C15	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C16	ECST1EY155	T.CAPACITOR CH 25V 1.5U	1	
C17	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C18	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C19,20	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C22	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C23	ECST1EY155	T.CAPACITOR CH 25V 1.5U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C24	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C25	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C26,27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C29	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C30	ECST1EY155	T.CAPACITOR CH 25V 1.5U	1	
C31	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C32	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C33	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C37-39	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C40-45	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	6	
C46-54	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	9	
C55-60	ECST1AY106Z	T.CAPACITOR CH 10V 10U	6	
C65	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C66	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C101	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C102	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C103,04	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C105	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C106	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C107	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C108-12	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C113	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C114	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C115	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C118	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C119	ECST1CY475	T.CAPACITOR CH 16V 4.7U	1	
C120-22	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C123	F1K1H1050002	C.CAPACITOR CH 50V 1U	1	
C126	F1K1H1050002	C.CAPACITOR CH 50V 1U	1	
C128	ECST1EX475	T.CAPACITOR CH 25V 4.7U	1	
C129	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C130	ECST1VY105Z	T.CAPACITOR CH 35V 1U	1	
C131	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C132	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C133-36	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C140	ECUX1C104ZFQ	C.CAPACITOR CH 16V 0.1U	1	
C141	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C142	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C143-45	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	3	
C146,47	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C148,49	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	2	
C151-53	ECST1AY106Z	T.CAPACITOR CH 10V 10U	3	
C154	ECST1CY475	T.CAPACITOR CH 16V 4.7U	1	
C158-61	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C162	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C170	F1K1H1050002	C.CAPACITOR CH 50V 1U	1	
C171	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C173	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C174	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C176,77	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C178,79	F3G1A4760002	T.CAPACITOR CH 10V 47U	2	
C180	ECST1EX475	T.CAPACITOR CH 25V 4.7U	1	
C181-85	F1L1E1060018	C.CAPACITOR CH 25V 10U	5	
C191-98	F1L1E1060018	C.CAPACITOR CH 25V 10U	8	
C202,03	ECA1EHG331	E.CAPACITOR 25V 330U	2	
C301,02	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	2	
C308	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C310	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C311	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C313	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C314	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C315	ECUX1C153KBQ	C.CAPACITOR CH 16V 0.015U	1	
C319-22	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C325	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C327	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C328	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C329	ECUX1C153KBQ	C.CAPACITOR CH 16V 0.015U	1	
C330	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C337	F1G1H8R00003	C.CAPACITOR CH 50V 8P	1	
C338	F1G1H5R00004	C.CAPACITOR CH 50V 5P	1	
C343	ECUX1C153KBQ	C.CAPACITOR CH 16V 0.015U	1	
C344	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C348,49	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C350	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C351	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C352,53	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C362	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C363	ECUX1C153KBQ	C.CAPACITOR CH 16V 0.015U	1	
C701	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C702	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C703	F1G1C822A040	C.CAPACITOR CH 16V 8.2U	1	
C704	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C705	ECUX1H390JCQ	C.CAPACITOR CH 50V 39P	1	
C706,07	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C708	ECJ0EB1E272K	C.CAPACITOR CH 25V 2700P	1	
C709	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C710	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C711,12	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C713	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C714	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C715	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C716	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C717	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C718	ECUX1H151JCQ	C.CAPACITOR CH 50V 150P	1	
C719	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C720	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C721	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C722,23	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C724	F3F1D4750002	T.CAPACITOR CH 20V 4.7U	1	
C725	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C727,28	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C729	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C730	F1G1E392A056	C.CAPACITOR CH 25V 3900P	1	
C734	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C735	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C744	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C745	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C746	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C748	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C751	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C752	F1G1E392A056	C.CAPACITOR CH 25V 3900P	1	
C753	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C754	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C755	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C757	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C763,64	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C765,66	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	2	
C767	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C768,69	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C770,71	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	2	
C772	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C773-75	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C776	F3F1D4750002	T.CAPACITOR CH 20V 4.7U	1	
C777	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C779	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C780	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C781	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C782	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C783	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C784	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C786-88	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C789	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C790	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C791	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C794	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C796	ECUX1C274KBN	C.CAPACITOR CH 16V 0.27U	1	
C797	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C798,99	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C801	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C802	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C803	F3E0J106A005	T.CAPACITOR CH6.3V 10U	1	
C805	F3E0J106A005	T.CAPACITOR CH6.3V 10U	1	
D101	MA121	DIODE	1	
D102	MA132A	DIODE	1	
D103	MA121	DIODE	1	
D303	B0JCDD000002	DIODE	1	
D305,06	B0JCDD000002	DIODE	2	
IC1	C1AB00001677	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC1	TC7W53F	IC	1	FOR VEP001A7A
IC1	TC7W53F	IC	1	FOR VEP001A7B
IC1	TC7W53F	IC	1	FOR VEP001A7C
IC2,C3	C1AB00001677	IC	2	
IC101	C1ZBZ0001836	IC	1	
IC102	C0JBAB000004	IC	1	
IC103	C0JBAB000003	IC	1	
IC104,05	TC7SH32FU	IC	2	
IC106	C0JBAF000162	IC	1	
IC107	TC7SH32FU	IC	1	
IC108	C0JBAF000184	VHC	1	
IC109	TC7SH04F	IC	1	
IC110	C0JBAA000115	IC	1	
IC111,12	C0JBAB000543	IC	2	
IC113	C0DBCGF00001	IC	1	
IC114	C0CBADG00002	IC	1	
IC116	NJM431U	IC	1	C0DBEZC00003
IC117	UPD16510GR	IC	1	
IC118	C0JBAA000102	IC	1	
IC119	UPD16510GR	IC	1	
IC120	C0JBAE000140	IC	1	
IC121	C0ABCA000038	IC	1	
IC122	C0JBAD000071	IC	1	
IC123	TC7SH32FU	IC	1	
IC124	C0JBAA000102	IC	1	
IC301	VSI3844B	IC	1	
IC303	MN7GD02B5DB	IC	1	
IC304	TC7W74FU	IC	1	
IC307	VSI3983B	EEPROM	1	
IC308	C0JBAF000162	IC	1	
IC309	C0FBAF000029	IC	1	
IC313	TC7SH04F	IC	1	
IC315,16	TC7SH14FU	IC	2	
IC317	C0JBAA000102	IC	1	
IC701	C0ABCA000053	IC	1	
IC702	C1AB00001159	IC	1	
IC703	C0CBAEC00006	IC	1	
IC704	C1AB00001262	IC	1	
IC707	C1AB00000431	IC	1	
IC709	C0FBAG000033	IC	1	
IC710	C0GBG0000028	IC	1	
IC711	C0CBAEC00006	IC	1	
IC713	C0CBADC00034	IC	1	
IC717	TC75W54FU	IC	1	
IC719	C0CBADC00034	IC	1	
L4-L6	VLQ0807K100	COIL 10UH	3	G1C100K00024
L101	G1C100KA0004	COIL 10UH	1	
L102	G1C100K00025	COIL 10UH	1	
L103,04	VLQ0807K100	COIL 10UH	2	G1C100K00024
L105	G1C100K00025	COIL 10UH	1	
L106,07	VLQ0807K100	COIL 10UH	2	G1C100K00024
L303	G1C4R7MA0031	COIL 4.7UH	1	
L304	VLQ0807K100	COIL 10UH	1	G1C100K00024
L307	VLQ0807K100	COIL 10UH	1	G1C100K00024
L309	G1C100K00019	COIL 10UH	1	
L701	VLQ0807K100	COIL 10UH	1	G1C100K00024
L702	VLQ0807K220	COIL 22UH	1	G1C220K00016
L703,04	VLQ0807K100	COIL 10UH	2	G1C100K00024
L706	VLQ0807K220	COIL 22UH	1	G1C220K00016
L707-09	VLQ0807K100	COIL 10UH	3	G1C100K00024
P1000	K1KB80A00092	CONNECTOR (FEMALE)	1	
P1001	VJS3846A030	CONNECTOR (FEMALE)	1	
P1002	VJS3791D015	CONNECTOR (FEMALE)	1	
P1003	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
P1004	K1MN39B00006	CONNECTOR	1	
P1006	K1MN51B00007	CONNECTOR	1	
Q101,02	2SB0970X0L	TRANSISTOR	2	
Q103	2SB709A-R	TRANSISTOR	1	
Q110	B1HBCFD00001	TRANSISTOR	1	
Q306	XN0460100L	TRANSISTOR-RESISTOR	1	
Q701	2SB0970X0L	TRANSISTOR	1	
Q708	2SB0970X0L	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q709	2SD221000L	TRANSISTOR	1	
QR301	B1GDBEJG0002	TRANSISTOR	1	
QR303	UNR9215J0L	TRANSISTOR	1	
QR705	UNR9211J0L	TRANSISTOR	1	
QR708,09	UNR9213J0L	TRANSISTOR	2	
R1-R3	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R22	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R23	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R24	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R64-66	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R75	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R78	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R81	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R85	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R102,03	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R104,05	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R106,07	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R112	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R113	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R114-20	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	7	
R121	ERJ2GEJ180	TRANSISTOR	1	
R125	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R126	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R128	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R129	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R130-34	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
R135	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R149	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R150,51	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R152,53	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R159-61	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	3	
R164,65	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R169	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R170	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R171	ERJ2RHD511	TRANSISTOR	1	
R172	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R173	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R179-81	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R182	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R183	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R184	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
R185	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R187	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R197	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R198	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R201	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R202	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
R203	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R204	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R206	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R207	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
R208	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R209	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R211	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R212	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
R213	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R214	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R220	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R221	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R222-24	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	3	
R225	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R226	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R231,32	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R233	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R236	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R301,02	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	2	
R304	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R308,09	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R310,11	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	
R312	ERJ2GEJ682	M.RESISTOR CH 1/16W 6.8K	1	
R313	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R314	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R317,18	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R320	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R322	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R323,24	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R326	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R328	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R329-35	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	7	
R339	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R341	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R342	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R346	ERJ2GEJ122	M.RESISTOR CH 1/16W 1.2K	1	
R347,48	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	2	
R350	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R352	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R354,55	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R356	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R357	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R358	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R360	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R361,62	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R367	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R368	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R370	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R371	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R373	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R375	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R376	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R377,78	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	2	
R380	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R391,92	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R427	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R429,30	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	2	
R432	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R433	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R439	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R466	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R470,71	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R472	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R481	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R485	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R486	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R487	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R488,89	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	2	
R490	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R493-09	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	17	
R510	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R511	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R512	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R519	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R520	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R521-26	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	6	
R527-32	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	6	
R533-36	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	4	
R537	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R540-42	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R543-45	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	3	
R546-48	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R549,50	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R551	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R553-55	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R556-60	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	5	
R561	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R562-68	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	7	
R571	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R572-76	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
R578	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R701	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R702	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R703,04	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	2	
R705	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R706	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R707	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R708	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R709	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R712	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R714	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R715	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R716-18	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	3	
R719	ERJ2GEJ564	M.RESISTOR CH 1/16W 560K	1	
R720	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R721	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R722	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R723,24	ERJ6RBB472	M.RESISTOR CH 1/10W 4.7K	2	
R725,26	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R727	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R728	ERJ2GEJ154	M.RESISTOR CH 1/16W 150K	1	
R729	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R730	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R731	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R732	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R733	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	1	
R734,35	ERJ3GEYJ2R2	M.RESISTOR CH 1/16W 2.2	2	
R736	ERJ6GEYJ1R0	M.RESISTOR CH 1/10W 1	1	
R737	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R738	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R739	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R740	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R741	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R742,43	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R744	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R745	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R747	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R748,49	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R750	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R751	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R752	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R753	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R754,55	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R760	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R765	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R768	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R770	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R771	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R776	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R778	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R780,81	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R786	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R787	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R788	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R789	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R797	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R799	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R801,02	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	2	
R804	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R807,08	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	2	
R813	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R814	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R815	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R816,17	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	2	
R821,22	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R823	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R824	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R825	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R830	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R831,32	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R837	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R856-60	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
R862	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R863	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R873	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R892	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R896	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R897	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R898	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R900	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R901,02	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	2	
R908	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R917	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R918	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R919	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R920	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R926	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R939	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R941,42	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R952	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R953,54	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R967	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R968-71	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R974-76	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R978	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R979	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R990	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R991	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R992	ERJ8GEYJ2R2	M.RESISTOR CH 1/8W 2.2	1	
R993	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R994	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R995,96	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R997,98	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R999	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1001-04	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R1068-74	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	7	
R1077-82	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	6	
R1084	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1087	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1089-98	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	10	
R1103	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1105,06	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R1108	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1125	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1134	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
X101	H1A3155B0002	CRYSTAL OSCILLATOR	1	
X302	H0J270500024	CRYSTAL OSCILLATOR	1	
■ E3	VEP01914A	POWER C.B.A.	1	(RTL)
■	VEP001A6A	POWER SUB C.B.A.	1	(RTL)FOR VEP01914A
C1,C2	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	FOR VEP001A6A
C1001,02	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	2	
C1011	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1012	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1013	ECJ0EB1E331K	C.CAPACITOR CH 25V 330P	1	
C1014	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C1021	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1022	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1023	ECJ0EB1E331K	C.CAPACITOR CH 25V 330P	1	
C1024	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C1031	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1032	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1033	ECJ0EB1E392K	C.CAPACITOR CH 25V 1U	1	
C1041	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1042	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1043	ECJ0EB1E331K	C.CAPACITOR CH 25V 330P	1	
C1044	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C1052	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
C1053	ECJ0EB1E272K	C.CAPACITOR CH 25V 2700P	1	
C1054	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C1056	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C1061	ECJ0EB1E152K	C.CAPACITOR CH 25V 1500P	1	
C1062	ECJ0EB1E332K	C.CAPACITOR CH 25V 3300P	1	
C1063-66	F1J1A335A005	C.CAPACITOR CH 10V 3.3U	4	
C1071	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1074	F1G1A473A014	C.CAPACITOR CH 10V 0.047U	1	
C1101	F1G1H2210001	C.CAPACITOR CH 50V 220P	1	
C1102	F1H1A334A028	C.CAPACITOR CH 10V 0.33U	1	
C1103	F1G1A473A014	C.CAPACITOR CH 10V 0.047U	1	
C1104-06	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C1107,08	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C1112	F1G1A473A014	C.CAPACITOR CH 10V 0.047U	1	
C1113	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1114	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1121,22	ECJ0EB1C682K	C.CAPACITOR CH 16V 6800P	2	
C1123	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1124	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1131	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C1132	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C1133	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1134	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1141	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1142	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C1143	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1144	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1151,52	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	2	
C1153	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1154	ECJ0EC1H820J	C.CAPACITOR CH 50V 82P	1	
C1155	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1171	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1172	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C1173	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1174	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1181	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1211,12	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C1215	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1221-27	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	7	
C1228	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C1231	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1239	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C1241,42	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C1248	ECST0JX476Z	T.CAPACITOR CH6.3V 47U	1	
C1281	F1L1E1060018	C.CAPACITOR CH 25V 10U	1	
C1312	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1322,23	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C1341	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1501,02	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C1717-20	VCK0303K225	C.CAPACITOR 2.2U	4	
C1722	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C1725,26	F1L2A1050004	C.CAPACITOR CH 10V 1U	2	
C1728	F1L2A1050004	C.CAPACITOR CH 10V 1U	1	
D1051	MA2J11100L	DIODE	1	
D1053	B0JCCE000006	DIODE	1	
D1061,62	MA2S72800L	DIODE	2	
D1101	MA8100-M	DIODE	1	
D1151	MAZ81800HL	DIODE	1	
D1152	MA2S11100L	DIODE	1	
D1309	MA2J11100L	DIODE	1	
D1518	MA3S132E0L	DIODE	1	
D1519	B0ADDJ000011	DIODE	1	
D1520	MAZ80620HL	DIODE	1	
D1521	B0BC4R200013	DIODE	1	
D1522	MA8130-M	DIODE	1	
D1706	U1GU44	DIODE	1	
D1707	MA2S11100L	DIODE	1	
IC1001	C0DBAFA00012	IC	1	
⚠ IP1003	K5H8011A0004	FUSE	1	
⚠ IP1701	K5H1021A0004	IC	1	
L1001	G1C4R7MA0024	COIL 4.7UH	1	
L1011	A921CY-470M	COIL 47UH	1	G1C470MA0011
L1021	G1C220MA0011	COIL 22UH	1	
L1031	G1C680MA0024	COIL 68UH	1	
L1041	G1C220MA0011	COIL 22UH	1	
L1061	G1ZZ00000059	COIL	1	
L1062	G1ZZ00000060	COIL	1	
L1111	J0JAC0000011	FILTER	1	
L1121	J0JAC0000011	FILTER	1	
L1131	J0JAC0000011	FILTER	1	
L1141	J0JAC0000011	FILTER	1	
L1151	J0JAC0000011	FILTER	1	
L1171	J0JAC0000011	FILTER	1	
L1211,12	G1C4R7MA0031	COIL 4.7UH	2	
L1215	VLQ0319K4R7	COIL 4.7UH	1	
L1221	VLQ0319K4R7	COIL 4.7UH	1	
L1222	G1C4R7M00008	COIL 4.7UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L1223,24	G1C100K00019	COIL 10UH	2	
L1225,26	G1C4R7MA0031	COIL 4.7UH	2	
L1227	G1C100KA0002	COIL 10UH	1	
L1231	G1C100MA0031	COIL 100UH	1	
L1241	VLQ0319K4R7	COIL 4.7UH	1	
L1242	G1C4R7MA0002	COIL 4.7UH	1	
L1281	G1C100K00019	COIL 10UH	1	
L1311	G1C4R7MA0031	COIL 4.7UH	1	
L1321	VLQ0319K4R7	COIL 4.7UH	1	
L1341	G1C4R7MA0031	COIL 4.7UH	1	
L1501	J0JHC0000018	FILTER	1	
L1703	G1C100K00016	COIL 10UH	1	
L1706	G1C100K00019	COIL 10UH	1	
P1501	VEE0V03	POWER CABLE	1	
P1701	K1KB50B00025	CONNECTOR (FEMALE)	1	
P1702	K1KA30B00055	CONNECTOR (MALE)	1	
P1703	VJS3846A030	CONNECTOR (FEMALE)	1	
Q1011	FP102	TRANSISTOR	1	
Q1021	XN09D5700L	TRANSISTOR	1	
Q1022	B1DFCD000011	TRANSISTOR	1	
Q1031	XN09D5700L	TRANSISTOR	1	
Q1041	XN09D5700L	TRANSISTOR	1	
Q1042	B1DFCD000011	TRANSISTOR	1	
Q1051	2SB766A-R	TRANSISTOR	1	
Q1061,62	FP102	TRANSISTOR	2	
Q1101	B1ADCF000059	TRANSISTOR	1	
Q1341	B1ADGD000005	TRANSISTOR	1	
Q1342	XP1501	TRANSISTOR-RESISTOR	1	
Q1501	B2ABGP000001	THYRISTOR	1	
Q1702	XP0460100L	TRANSISTOR	1	
Q1704	2SJ278	TRANSISTOR	1	
QR1001	B1GDCFGN0009	TRANSISTOR	1	
QR1101	UNR9214J0L	TRANSISTOR	1	
QR1102	UN9213	TRANSISTOR-RESISTOR	1	
QR1161	B1GDCFJA0006	TRANSISTOR	1	
QR1162	UN9115	TRANSISTOR-RESISTOR	1	
R1002	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1011	ERJ2RHD682	M.RESISTOR CH 1/16W 6.8K	1	
R1012,13	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1014	ERJ2RHD391	M.RESISTOR CH 1/16W 390	1	
R1015	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1016	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1021	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1022,23	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1024	ERJ2RHD221	M.RESISTOR CH 1/16W 220	1	
R1025	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1026	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R1031	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R1032,33	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1034	ERJ2RHD151	M.RESISTOR CH 1/16W 150	1	
R1035	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1036	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1041	ERJ2RHD821	M.RESISTOR CH 1/16W 820	1	
R1042,43	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1044	ERJ2RHD181	M.RESISTOR CH 1/16W 180	1	
R1045	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1046	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R1051	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R1052,53	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1054	ERJ2RHD151	M.RESISTOR CH 1/16W 150	1	
R1055	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1056	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R1061,62	ERJ2GEJ122	M.RESISTOR CH 1/16W 1.2K	2	
R1074	ERJ2RHD391	M.RESISTOR CH 1/16W 390	1	
R1075	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1076	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R1101	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1102	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R1103	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1104	ERJ2GEJ123	M.RESISTOR CH 1/16W 12K	1	
R1107	ERJ2GEJ225	M.RESISTOR CH 1/16W 2.2M	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1108	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1109	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1111	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	1	
R1112	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R1116	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1121	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1122	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1126	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1131	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1132	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1136	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1141	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1142	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1146	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1151	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1152	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R1153	ERJ2RHD243	M.RESISTOR CH 1/16W 24K	1	
R1154	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R1155	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1156	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1161	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1171	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1172	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R1176	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1179	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1182	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1221	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1309	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1323	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1341	ERJ2GEJ121	M.RESISTOR CH 1/16W 120	1	
R1343	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1344	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1345	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R1402	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R1501	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1502	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1505	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1519	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	1	
R1520	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1521	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1523	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1733	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1738	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	1	
R1739	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1746	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1749	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
T1051	G5D1A0000026	TRANSFORMER	1	
T1701	G5DYA0000051	TRANSFORMER	1	
		MISCELLANEOUS		
	VSC5413	CCD HEAT SINK	1	
■ E4	VEP01922A	POWER 2 C.B.A.	1	(RTL)
C1251	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
C1252	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C1391	F3F1A226A008	T.CAPACITOR CH 10V 22U	1	
C1451	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1456	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1491	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1801,02	VCK0303K225	C.CAPACITOR 2.2U	2	
C1803	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1805	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1806	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C1808	F1G1A473A014	C.CAPACITOR CH 10V 0.047U	1	
C1809	F1G1H2210001	C.CAPACITOR CH 50V 220P	1	
C1810	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1812	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1813	ECJ0EB1C682K	C.CAPACITOR CH 16V 6800P	1	
C1814	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1815	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C1816	VCK0303K225	C.CAPACITOR 2.2U	1	
C1821	ECJ0EB1E331K	C.CAPACITOR CH 25V 330P	1	
C1823,24	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	2	
C1827	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C1830	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1831	VCK0303K225	C.CAPACITOR 2.2U	1	
C1832	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
D1801	MA2J11100L	DIODE	1	
D1802,03	MA2S11100L	DIODE	2	
D1805	MA3J70000L	DIODE	1	
D1807	MA2S11100L	DIODE	1	
D1808	MA8120-M	DIODE	1	
D1809,10	MAZ82700ML	DIODE	2	
D1811	MA3S132E0L	DIODE	1	
D1812	MA2S11100L	DIODE	1	
IC1391	C0DBZFZ00003	IC	1	
IC1801	BA9743AFV	IC	1	C0DBAZC00010
L1251	G1C100KA0004	COIL 10UH	1	
L1252	G1C100K00019	COIL 10UH	1	
L1801,02	J0JAC0000011	FILTER	2	
L1804	G1C331M00006	COIL 330UH	1	
L1805	G1C100K00019	COIL 10UH	1	
L1807	VLQ0319K100	COIL 10UH	1	G1C100K00023
P1801	K1KB30B00029	CONNECTOR (FEMALE)	1	
Q1351	2SD2216J0L	TRANSISTOR	1	
Q1391	2SB798	TRANSISTOR	1	B1BDBC000001
Q1451	2SD1819AHL	TRANSISTOR	1	
Q1452	XP1401	TRANSISTOR-RESISTOR	1	
Q1453	B1ADCF000059	TRANSISTOR	1	
Q1491	2SD2216J0L	TRANSISTOR	1	
Q1803	XP0460100L	TRANSISTOR	1	
Q1805	2SD1328-R	TRANSISTOR	1	
Q1806	B1DHCC000029	TRANSISTOR	1	
QR1352	UNR9111J0L	TRANSISTOR	1	
QR1451	UN9213	TRANSISTOR-RESISTOR	1	
QR1801	XP0121300L	TRANSISTOR	1	
QR1803	UN9213	TRANSISTOR-RESISTOR	1	
QR1804	UN9112J	TRANSISTOR	1	
QR1806	XP0111300L	TRANSISTOR	1	
R1451	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1452	ERJ2RHD391	M.RESISTOR CH 1/16W 390	1	
R1453	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1454	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R1455	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1456	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R1457,58	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R1491	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1492	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R1493	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1494	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1801,02	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R1804	ERJ2RHD243	M.RESISTOR CH 1/16W 24K	1	
R1805	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R1806,07	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	2	
R1808	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1809	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R1810	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R1811,12	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R1813,14	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	2	
R1815	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1816	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1817	ERJ2RHD271	M.RESISTOR CH 1/16W 270	1	
R1819	ERJ2GEJ334	M.RESISTOR CH 1/16W 330K	1	
R1820	ERJ2GEJ684	M.RESISTOR CH 1/16W 680K	1	
R1821	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1822	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1823	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R1824	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R1825	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1826	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1827	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1828	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R1829	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	1	
R1831	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1832	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1834	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R1835	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R1836	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1837	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R1842,43	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R1846	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1848	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1849	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1850	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1851	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
		MISCELLANEOUS		
	VSC5415	MECHA SHIELD SHEET	1	
■ E5	VEP05395A	H/R AMP C.B.A.	1	(RTL)
C5001	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C5002,03	F1J0J475A006	C.CAPACITOR CH6.3V 1U	2	
C5004	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5005	ECJ0EB1E681K	C.CAPACITOR CH 25V 680P	1	
C5006	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5008	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5012	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C5013	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5014	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C5016-18	F3F1C1060002	T.CAPACITOR CH 16V 10U	3	
C5021-24	F1G1H8R00003	C.CAPACITOR CH 50V 8P	4	
IC5001	AN3732FJMEFV	IC	1	
L5001	G1C101KA0031	COIL 100UH	1	
L5002,03	G1C100K00019	COIL 10UH	2	
P5001	K1MN08B00040	CONNECTOR	1	
R5001	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R5004	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R5006	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R5007,08	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R5009-12	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	4	
R5015	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
		MISCELLANEOUS		
	VSC4639	SHIELD CASE	1	
■ E6	VEP04817A	R SIDE C.B.A.	1	(RTL)
C4601	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C4602	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4605	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4607	ECST1VV106	E.CAPACITOR CH 35V 10M	1	
C4617	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C4618	ECST1AC226ZR	T.CAPACITOR CH 10V 22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4619	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C4620	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4622,23	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	2	
D4601	MA142K	DIODE	1	
D4604,05	MA142WA	DIODE	2	
D4606,07	MA142K	DIODE	2	
D4608	MA142WA	DIODE	1	
D4609	MA142K	DIODE	1	
IC4601	TA75W558FU	IC	1	C0ABBA000042
IC4605	AN77L09M	IC	1	
P4601	K1KA04B00137	CONNECTOR (MALE)	1	
P4603	K1KA08B00137	CONNECTOR (MALE)	1	
P4604	K1MN51B00007	CONNECTOR	1	
P4605	K1KA02B00053	CONNECTOR (MALE)	1	
P4606	K1MN27B00034	CONNECTOR	1	
P4607	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
P4608	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
Q4601	2SD1819A0L	TRANSISTOR	1	
QR4601,02	UN5212	TRANSISTOR-RESISTOR	2	
R4618	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4620	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4622,23	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4625	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R4627-29	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R4630	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R4632,33	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4635	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4637	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R4638	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4639	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4640,41	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4644,45	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R4690,91	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
SW4601	K0D123A00076	SWITCH	1	
SW4602	K0D122A00126	SWITCH	1	
SW4604,05	K0D122A00126	SWITCH	2	
SW4606,07	EVQQW101M	SWITCH	2	
SW4609-14	EVQQW101M	SWITCH	6	
VR4601,02	D2BBA14A0002	V.RESISTOR 10K	2	
■ E7	VEP06E92A	CAMERA OP1 C.B.A.	1	(RTL)
D301-04	MA142WA	DIODE	4	
P301	K1MN10B00052	CONNECTOR	1	
SW301	K0D113B00029	SWITCH	1	
SW302-06	K0H1BA000442	SWITCH	5	
		MISCELLANEOUS		
	VMP7335	C.B.A. HOLDER ANGLE	1	
	XQN2+B3FN	SCREW	2	
■ E8	VEP06E93A	CAMERA OP2 C.B.A.	1	(RTL)
D351,52	MA142WA	DIODE	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D353,54	MA142K	DIODE	2	
SW351,52	K0E112A00108	SWITCH	2	
SW353	K0H1BA000251	SWITCH	1	
SW355	EVQQW101M	SWITCH	1	
SW356	K9AA01500015	SWITCH	1	
		MISCELLANEOUS		
	VGQ6917	MENU ROTATION KNOB SHEET	1	
	VGU9198	ROTATION KNOB	1	
	XQN2+B3FN	SCREW	4	
	VMP7353	W. BAL ANGLE	1	
	VMP7342	IRIS JOG ANGLE	1	
■ E9	VEP28272B	EVF A C.B.A.	1	(RTL)
REF1	K1MN16B00039	CONNECTOR	1	
REF2	K1MN19B00029	CONNECTOR	1	
■ E10	VEP28275B	EVF B C.B.A.	1	(RTL)
REF1	A2CD00000030	TRANSISTOR	1	
REF2	B1DFCL000006	TRANSISTOR	1	
REF3	ETJ11K90AM	TRANSFORMER	1	
REF4	F1L1A2260013	C.CAPACITOR CH 10V 22U	1	
REF5	G1C100KA0005	COIL 10UH	1	
■ E11	VEP000Z0A	MENU C.B.A.	1	(RTL)
D610-12	MA142WA	DIODE	3	
D614-16	MA142WA	DIODE	3	
P610	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
SW608	K0H1ZA000001	SWITCH	1	
SW609	EVQQWS01M	SWITCH	1	
■ E12	VEP06E95A	HANDLE 1 C.B.A.	1	(RTL)
C451,52	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	2	
C453	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C454,55	ECUM1E823KBN	C.CAPACITOR CH 25V 0.082U	2	
C456,57	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	2	
C458,59	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C460,61	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	2	
C462	ECST1AX226Z	T.CAPACITOR CH 10V 22U	1	
C463	ECST1CC226Z	T.CAPACITOR CH 16V 22U	1	
C464	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
D451-53	MA142K	DIODE	3	
IC451,52	TA75W01FU	IC	2	
P451	VJS3801B020	CONNECTOR (FEMALE)	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P452	K1MN10B00052	CONNECTOR	1	
P453	K1MN07B00070	CONNECTOR	1	
Q451,52	2SD1819A0L	TRANSISTOR	2	
Q453	2SD1824	TRANSISTOR	1	
R453,54	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R457,58	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R459-62	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	4	
R463,64	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R465,66	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R467,68	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	2	
R469	ERJ3GEYJ133	M.RESISTOR CH 1/16W 13K	1	
R481	ERJ3GEYJ133	M.RESISTOR CH 1/16W 13K	1	
R482,83	ERJ3GEYJ623	M.RESISTOR CH 1/16W 62K	2	
R486	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R487	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R488	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R489,90	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R491-94	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	4	
SW451	RSH1A77ZA-A	SWITCH	1	K0H1BA000104
SW452,53	K0H1BA000433	SWITCH	2	
		MISCELLANEOUS		
	VGQ6880	HANDLE S/S HOLDER	1	
	VGQ6881	T/W BUTTON HOLDER	1	
	VGU9208	HANDLE T/W BUTTON	1	
	VMS7185	HANDLE ZOOM SHAFT	1	
	XUC15FP	E-RING	2	
	XQN2+CJ5	SCREW	2	
	VMG1480	HANDLE T/W BUTTON RUBBER	1	
■ E13	VEP06F04A	HANDLE 2 C.B.A.	1	(RTL)
C471	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C472	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
D471,72	MA142K	DIODE	2	
D473	B3AAB0000129	LED	1	
IC471	VEK8283	REMOTE CONTROL RECEIVER	1	B3RZB0000001
R471	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R472	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
SW471	K0D123A00035	SWITCH	1	
W471,72	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
■ E14	VEP04828A	MIC C.B.A.	1	(RTL)
C4801-04	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	4	
C4806	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C4808	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C4809	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C4810	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C4811	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C4812	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C4813	F3E0J106A005	T.CAPACITOR CH6.3V 10U	1	
C4814	ECST0JY226	T.CAPACITOR CH6.3V 22U	1	
FP4801	K1MN07B00072	CONNECTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4801	C0ABBB000081	IC	1	
M4801-04	WM-61B102A	ECM	4	
Q4801	2SD2216J	TRANSISTOR	1	
R4801-04	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	4	
R4805-12	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	8	
R4813	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R4814	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R4815	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
		MISCELLANEOUS		
	VMT1249	MIC DUNPER	1	
	VWJ1590	INT MIC FLEX.	1	
■ E15	VEP06E94A	F TALLY C.B.A.	1	(RTL)
C401	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C402	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
D401	B3AAB0000129	LED	1	
IC401	VEK8283	REMOTE CONTROL RECEIVER	1	B3RZB0000001
R401	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R402	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
■ E16	VEP000Y2A	EVR CONNECT	1	(RTL)
B51	VSB0407	BATTERY	1	
P51	K1KA30B00055	CONNECTOR (MALE)	1	
P52	K1MN51B00007	CONNECTOR	1	
P53	K1MN16A00038	CONNECTOR	1	
P54	VJS3791B013	CONNECTOR (FEMALE)	1	
P55	K1KA60A00065	CONNECTOR	1	
P56	K1KBC0B00009	CONNECTOR (FEMALE)	1	
R52	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
■ E17	VEP000Y3A	VC CONNECT C.B.A.	1	(RTL)
P551	K1KBC0A00051	CONNECTOR (FEMALE)	1	
P552	VJS3826C024	CONNECTOR (FEMALE)	1	
P553	K1MN12B00105	CONNECTOR	1	
P556	K1KA04B00137	CONNECTOR (MALE)	1	
P557	K1KA80A00098	CONNECTOR (MALE)	1	
P559	K1MN18A00026	CONNECTOR	1	
■ E18	VEP000Y4A	LCD OPEN SW C.B.A.	1	(RTL)
SW701	K0L1BA000015	SWITCH	1	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		MISCELLANEOUS		
	VMP7354	C.B.A. HOLDER ANGLE	1	
	XQN2+B3FN	SCREW	1	
	VEE0U27	LCD OPEN CABLE	1	
■ E19	VEP000Y6A	REAR JACK CONNECT C.B.A.	1	(RTL)
P251	K1KB30A00128	CONNECTOR (FEMALE)	1	
		MISCELLANEOUS		
⚠	VMZ3097	POWER INSULATION SHEET C	1	
■ E20	VEP000Y7A	EJECT C.B.A.	1	(RTL)
P651	K1KA02B00053	CONNECTOR (MALE)	1	
SW651	K0L1BA000015	SWITCH	1	
		MISCELLANEOUS		
	VMP7334	EJECT C.B.A. HOLDER ANGLE	1	
	XQN2+B3FN	SCREW	2	
■ E21	VEP04819A	REAR JACK C.B.A.	1	(RTL)
J49012	VJJ0522	JACK	1	K2HC103B0082
J49013	VJJ0182	SYNC EDIT JACK	1	K2HB103B0015
L49013,14	VLF1315A102	FILTER	2	J0JHC0000015
P49011	K1KA02A00237	CONNECTOR (MALE)	1	
P49012	K1MN16B00112	CONNECTOR	1	
R49011-16	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	6	
T49012	VLF1394	FILTER	1	J0MAB0000077
■ E22	VEP06E96A	POWER SW C.B.A.	1	(RTL)
D502	MA142WA	DIODE	1	
P501	K1MN10B00070	CONNECTOR	1	
P502	K1MN06B00013	CONNECTOR	1	
SW501	VMG0763	SWITCH	1	
SW502	K0L1BA000015	SWITCH	1	
SW503	K0L1BA000037	SWITCH	1	
		MISCELLANEOUS		
	VMP7434	C.B.A. HOLDER ANGLE	1	
	XQN2+B3FN	SCREW	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E23	VEP06E90A	ZOOM SW C.B.A.	1	(RTL)
C201,02	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
D202	MA142K	DIODE	1	
SW201	EVQQWS01M	SWITCH	1	
VR201	D2B1B15B0001	V.RESISTOR 100K	1	
■ E24	VEP000Y9A	TOP OP C.B.A.	1	(RTL)
D601-03	MA142WA	DIODE	3	
D605	MA142WA	DIODE	1	
SW601-04	EVQQWS01M	SWITCH	4	
SW606	EVQQWS01M	SWITCH	1	
■ E25	VEP22331A	GYRO C.B.A.	1	(RTL)
C101	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C102,03	ECST0JY226	T.CAPACITOR CH6.3V 22U	2	
C104-07	F1J0J106A014	T.CAPACITOR CH6.3V 10U	4	
C108,09	ECUX1H471KBV	C.CAPACITOR CH 50V 470P	2	
C112	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C113	ECUX1C105ZFX	C.CAPACITOR CH 16V 1U	1	
C116,17	ECUX1H471KBV	C.CAPACITOR CH 50V 470P	2	
C120	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C121	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C122	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C123	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C124	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C125	F3G1C2260001	T.CAPACITOR CH 16V 22U	1	
IC101	L2ES00000005	IC	1	
IC102	L2ES00000006	IC	1	
IC103	C0ABCA000042	IC	1	
IC104	C0JBAS000065	IC	1	
IC105	C0ABAA000046	IC	1	
L101	G1C100K00019	COIL 10UH	1	
L103,04	G1C100K00019	COIL 10UH	2	
P101	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
R101,02	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R103-06	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	4	
R107	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R110	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R111,12	ERJ3GEYJ274	M.RESISTOR CH 1/16W 270K	2	
R113,14	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R115-18	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R119,20	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
		MISCELLANEOUS		
	XQN2+B4FN	SCREW	1	
	VMP7352	GYRO ANGLE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E26	VEP04816A	SIDE JACK C.B.A.	1	(RTL)
C4451,52	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	2	
C44711	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C44712	ECUX1A474KBV	C.CAPACITOR CH 10V 0.1U	1	
D4451	MA3062M	DIODE	1	
D44711	PH310	DIODE	1	B3GA00000001
D44712	MA132WA	DIODE	1	
J4401	K1FA104A0011	CONNECTOR	1	
J4451	K2HA303A0019	JACK	1	
J4452	K2HZ104A0002	S TERMINAL JACK	1	
L4402,03	J0MAB0000110	FILTER	2	
L4452,53	VLF1315A102	FILTER	2	J0JHC0000015
P4401	K1MN22B00034	CONNECTOR	1	
Q44711	2SD10300SL	TRANSISTOR	1	
Q44712	2SD1819A-R	TRANSISTOR	1	
R4451-54	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R4460,61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4463	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4464	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R44711	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	D0GD225JA003
R44712	ERJ3GEYJ106	M.RESISTOR CH 1/16W 10M	1	
R44713	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R44714	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R44715	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
TH4401	D4CC11030012	THERMISTOR	1	
■ E27	VEP04815A	EXT MIC CH2 C.B.A.	1	(RTL)
C4003,04	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C4006	ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	1	
C4009,10	ECA1HEN4R7	E.CAPACITOR 50V 4.7U	2	
C4013	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4016,17	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C4019	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4020	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4022	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4026	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4030	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4031	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4032	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4034	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4035	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4036	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4107	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
D4001	MA142WK	DIODE	1	
D4002,03	MA3J14300L	DIODE	2	
D4007	MA142K	DIODE	1	
IC4001	NJM2122M	IC	1	
IC4002	TA75W558FU	IC	1	C0ABBA000042
IC4007	TC7W53F	IC	1	
IC4008	AN77L09M	IC	1	
J4101	K1AB103A0007	CONNECTOR (MALE)	1	
L4001,02	VLQ0163J100	COIL 10UH	2	G1C100J00001
L4101	VLF1315A102	FILTER	1	J0JHC0000015

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L4103	VLF1315A102	FILTER	1	J0JHC0000015
L4110	VLF1315A102	FILTER	1	J0JHC0000015
P4001	K1KA20A00048	CONNECTOR (MALE)	1	
P4002	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
Q4002	2SB1220-R	TRANSISTOR	1	
QR4002	UNR521300L	TRANSISTOR	1	
QR4004	UNR521300L	TRANSISTOR	1	
QR4006	UNR521300L	TRANSISTOR	1	
QR4008	UNR511300L	TRANSISTOR	1	
QR4010	UNR521300L	TRANSISTOR	1	
R4006	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4009,10	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R4015,16	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R4019,20	ERJ3RBD132	M.RESISTOR CH 1/16W 1.3K	2	
R4021	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4022	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4024	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4030	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R4031,32	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4040	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R4044,45	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R4048,49	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R4051	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R4053	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R4055	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R4057	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R4060	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4061	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4062	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4066	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
SW4001	K0D142A00023	SWITCH	1	
■ E28	VEP04825A	EXT MIC CH1 C.B.A.	1	(RTL)
C4001,02	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C4005	ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	1	
C4007,08	ECA1HEN4R7	E.CAPACITOR 50V 4.7U	2	
C4011	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4012	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4014,15	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C4018	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4021	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4023	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4024	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4025	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4027,28	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C4029	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4033	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4037	EEVHB1H3R3	E.CAPACITOR 50V 3.3U	1	
C4038	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4108	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
D4004,05	MA3J14300L	DIODE	2	
D4006	MA142K	DIODE	1	
IC4003	AN77L09M	IC	1	
IC4004	NJM2122M	IC	1	
IC4005	TA75W558FU	IC	1	C0ABBA000042
IC4006	TC7W53F	IC	1	
J4102	K1AB103A0007	CONNECTOR (MALE)	1	
L4003,04	VLQ0163J100	COIL 10UH	2	G1C100J00001
L4105	VLF1315A102	FILTER	1	J0JHC0000015
L4107,08	VLF1315A102	FILTER	2	J0JHC0000015

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P4003	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
Q4001	2SB1220-R	TRANSISTOR	1	
Q4003	2SD1819A0L	TRANSISTOR	1	
Q4004	2SD1824	TRANSISTOR	1	
QR4001	UNR521300L	TRANSISTOR	1	
QR4003	UNR521300L	TRANSISTOR	1	
QR4005	UNR521300L	TRANSISTOR	1	
QR4007	UNR511300L	TRANSISTOR	1	
QR4009	UNR521300L	TRANSISTOR	1	
R4001	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4007,08	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R4011,12	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R4013	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4014	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4017,18	ERJ3RBD132	M.RESISTOR CH 1/16W 1.3K	2	
R4023	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4029	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R4033,34	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4035	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4036	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R4037	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4039	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R4042,43	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R4046,47	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R4050	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R4052	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R4054	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R4056	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R4058	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4059	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4063	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4064	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4067	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
SW4002	K0D142A00023	SWITCH	1	
■ E29	VEP06E89A	MODE SW C.B.A.	1	(RTL)
D151	MA142WA	DIODE	1	
D152-56	MA142K	DIODE	5	
D157	B3AAB0000037	DIODE	1	
D158	B3ABB0000086	LED	1	
D160	MA142K	DIODE	1	
P152	VJS3791B013	CONNECTOR (FEMALE)	1	
R154	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R155	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
SW151	K0G119A00024	SWITCH	1	
SW152,53	K0H1BA000251	SWITCH	2	
■ E30	VEP01923A	DC IN C.B.A.	1	(RTL)
J31	VJS3381	CONNECTOR (FEMALE)	1	K2EC2B000001
■ E31	VEP01915A	BATTERY C.B.A.	1	(RTL)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2,C3	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
D1	NSD03A20	DIODE	1	B0ECMM000002
⚠ IP1	K5H312300003	FUSE	1	
L2	J0MAB0000060	FILTER	1	
P1	K1KA03B00102	CONNECTOR (MALE)	1	
■ E32	VEP26257A	MONITOR C.B.A.	1	(RTL)
■	VEP06E29A	HALL SENSOR FLEX CARD CBA	1	(RTL)FOR VEP26257A
C901	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C902	F3F0G476A009	T.CAPACITOR CH 4V 47U	1	
C903	F3F0J226A007	T.CAPACITOR CH6.3V 22U	1	
C905,06	ECJ4YB1C106V	C.CAPACITOR CH 16V 10U	2	
C907	F3F0J335A008	T.CAPACITOR CH6.3V 3.3U	1	
C908,09	ECJ0WB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C910-13	F1H0J474A002	T.CAPACITOR CH6.3V 0.47U	4	
C914	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C915	ECJ1ZB1C104K	C.CAPACITOR CH 16V 0.1U	1	
C916-19	ECJ0WB1C103K	C.CAPACITOR CH 16V 0.01U	4	
C923	ECJ1VC1H471G	C.CAPACITOR CH 50V 470P	1	
C925	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C930	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C931	ECJ0EC1H330J	C.CAPACITOR CH 50V 33P	1	
C932	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	
C933	ECJ2YB1C474K	C.CAPACITOR CH 16V 0.47U	1	
C934	ECJ0WB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C935	ECJ0EB1C682K	C.CAPACITOR CH 16V 6800P	1	
C936,37	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C938	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C939	ECJ1VC1H331G	C.CAPACITOR CH 50V 330P	1	
C940	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C941	F1G1H100A448	C.CAPACITOR CH 50V 10P	1	
C942	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	1	
C943,44	ECJ1VB1A224K	T.CAPACITOR CH 10V 0.22U	2	
C945	ECJ0EB1E332K	C.CAPACITOR CH 25V 3300P	1	
C946	ECJ4YB1C106V	C.CAPACITOR CH 16V 10U	1	
C947,48	ECJ1ZB1C104K	C.CAPACITOR CH 16V 0.1U	2	
C949	ECJ0WB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C950	F1J1C105A091	C.CAPACITOR CH 16V 1U	1	
C952	ECJ1ZB1C104K	C.CAPACITOR CH 16V 0.1U	1	
D901	MA338	DIODE	1	
D902	MA6Z12100L	DIODE	1	
D903	MA3S132D0L	DIODE	1	
D904	MA4X159A0L	DIODE	1	
D905,06	B0JCEE000002	DIODE	2	
D907	MA2J11100L	DIODE	1	
D908	MAZ80270LL	DIODE	1	
D909	MA8043-M	DIODE	1	
D910	B0BC6R100014	DIODE	1	
FP901	K1MN24B00068	CONNECTOR	1	
FP903	K1MN25B00035	CONNECTOR	1	
IC901	C0HBA0000071	IC	1	
IC903	C0JBAB000350	IC	1	
IC904	C0JBAB000391	IC	1	
IC905	SN74LV04APW	IC	1	C0JBAB000247
IC991	DN8797MSC	IC	1	
L901-04	VLQ0807K100	COIL 10UH	4	G1C100K00024
L905	G1C100MA0031	COIL 100UH	1	
L907	VLQ0426J3R3	COIL 3.3UH	1	G1C3R3J00009

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q901	B1ADCF000059	TRANSISTOR	1	
Q902	B1CFNG000001	TRANSISTOR	1	
Q903	XP0460100L	TRANSISTOR	1	
Q904	XP1501	TRANSISTOR-RESISTOR	1	
Q905	B1ACGD000006	TRANSISTOR	1	
Q906-08	XP0460100L	TRANSISTOR	3	
QR901,02	B1GBCFNA0014	TRANSISTOR	2	
QR903	B1GBCFJN0017	TRANSISTOR	1	
QR904	UNR9214J0L	TRANSISTOR	1	
R901-03	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	3	
R904	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R905	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R906	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R907-09	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R910,11	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R912-14	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	3	
R918	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R919	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R920	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R921	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R922	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R923	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R924	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R925	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R926	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R927	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R928	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R929	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R930,31	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R932	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R933	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R934	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R935	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R936	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R937	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R938	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R940	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R941-43	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R944	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R945	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R946	ERJ2RHD823	M.RESISTOR CH 1/16W 82K	1	
R947	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R951	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	1	
R952	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R953	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R954	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R955	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R956	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R957	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R958	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R959	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R960	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R961	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R962	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	1	
R963	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R964	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R965,66	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	2	
R967	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R968,69	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	2	
R970	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R971	ERJ3GEYJ335	M.RESISTOR CH 1/16W 3.3M	1	
R972	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R973,74	ERJ8GEYJ335	M.RESISTOR CH 1/8W 3.3M	2	
R975	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R976	ERJ3RBD681	M.RESISTOR CH 1/16W 680	1	
R977	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R978	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1	
R979	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R985,86	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	2	
T901	ETJ09K44AZ	TRANSFORMER	1	
T902	EFTU21R203	TRANSFORMER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
W901	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
W902	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	

ELECTRICAL ADJUSTMENT PROCEDURE

1. ADJUSTMENT SYSTEM

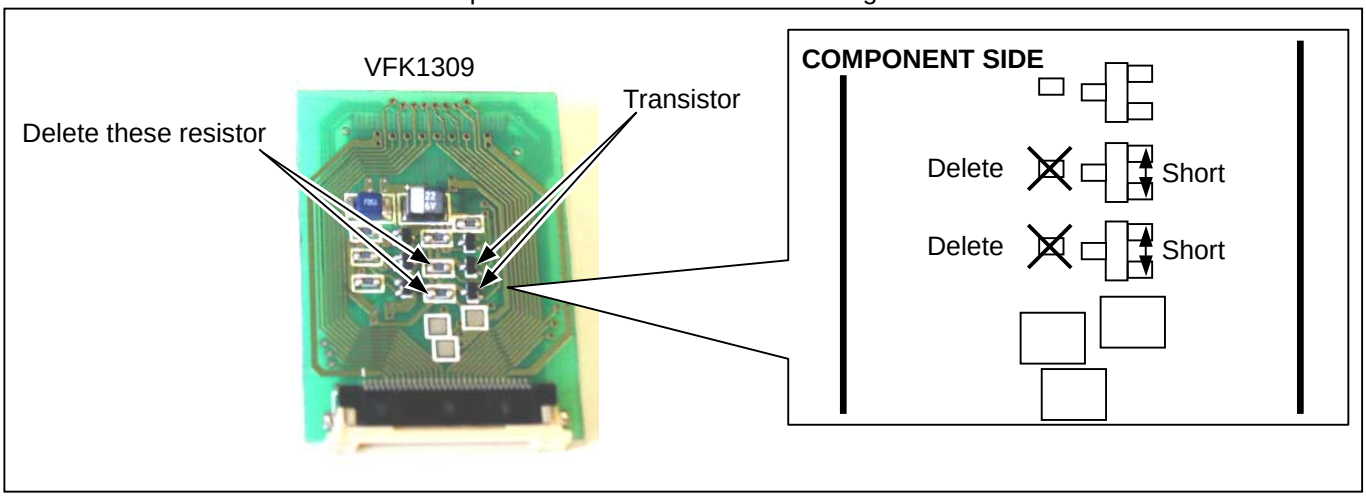
For performing the electrical adjustment, the following tool are required.

NAME	Part Number	Pcs.	Remark
Measuring Board	VFK1308P	1	
EVR Connector Board	VFK1309A	1	NOTE
EVR Extender Board	VFK1694	1	
30pin Flat Cable	VFK1317	2	
DC Cable	VJA0941	1	
9pin RS232C cross cable	---		
AC Adaptor	---		

NOTE:
1. VFK1309 can be use to this adjustment system except LCD adjustment.
2. If you have VFK1309, it can be modified to VFK1309A as following below indicated specification.

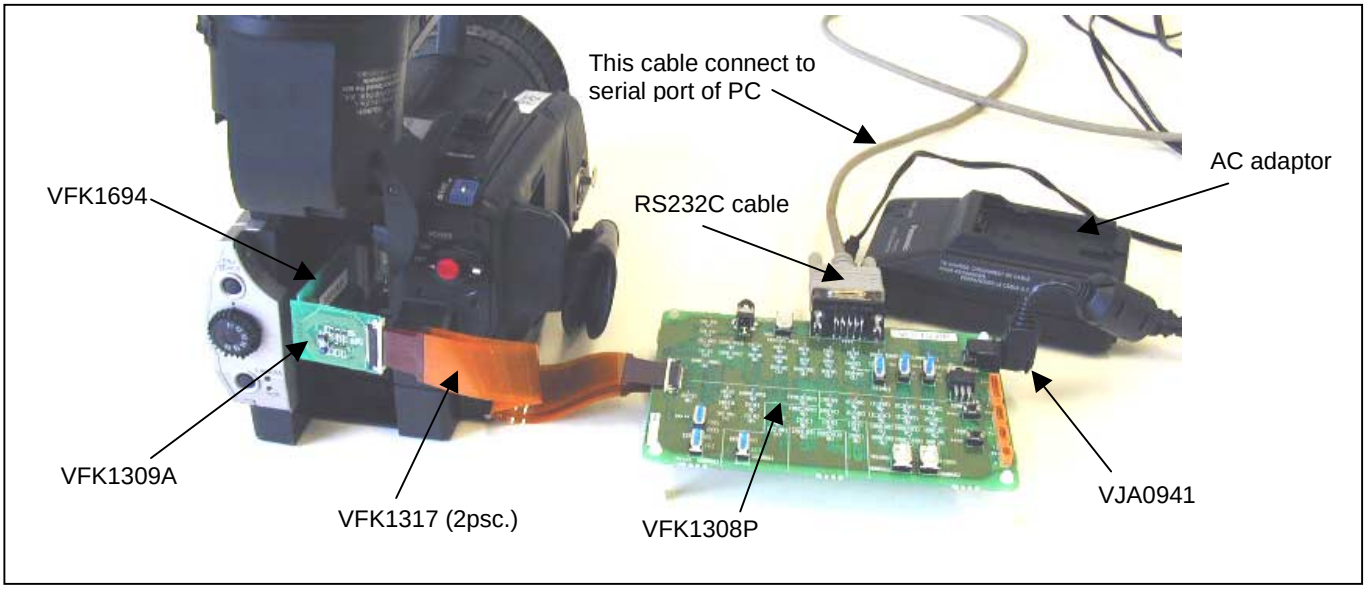
1-1. Modification procedure of VFK1309

1. Delete 2 pieces of resistor as shown figure.
2. Shot between emitter and base of 2 pieces of transistor as shown in figure.



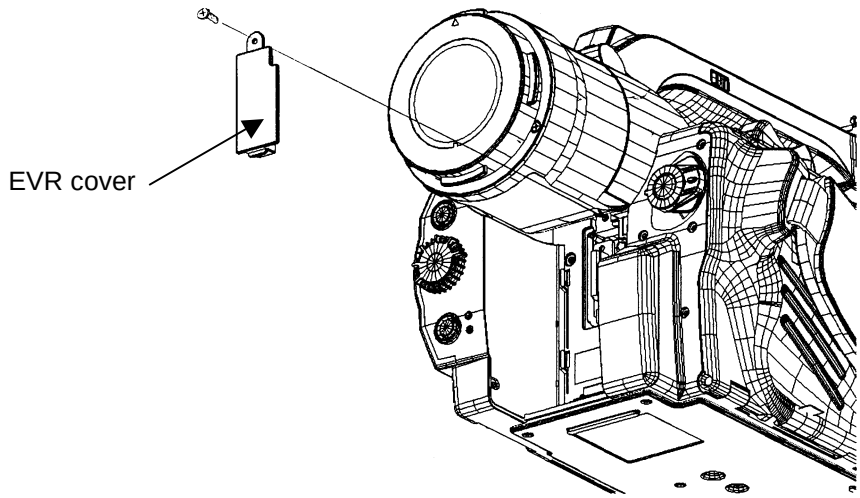
1-2. Connection

Please refer to next item 1-3 as detail explanation.

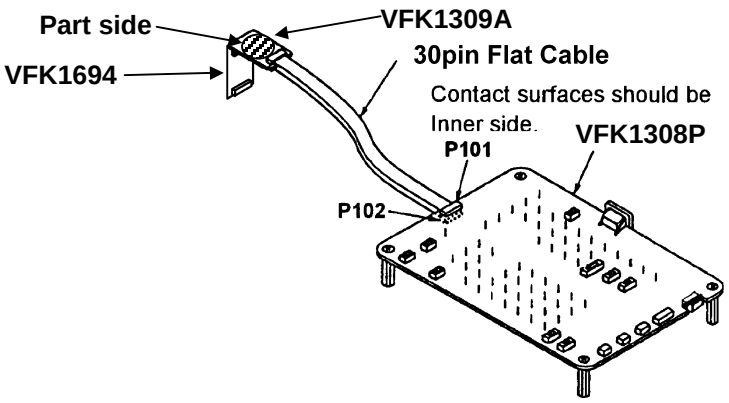


1-3. System Hook up Procedures

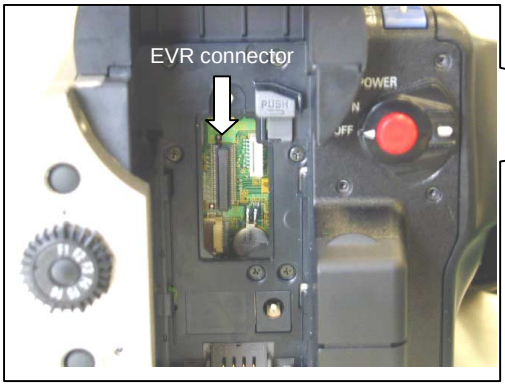
1. Unscrew 1 screw and remove the EVR cover.

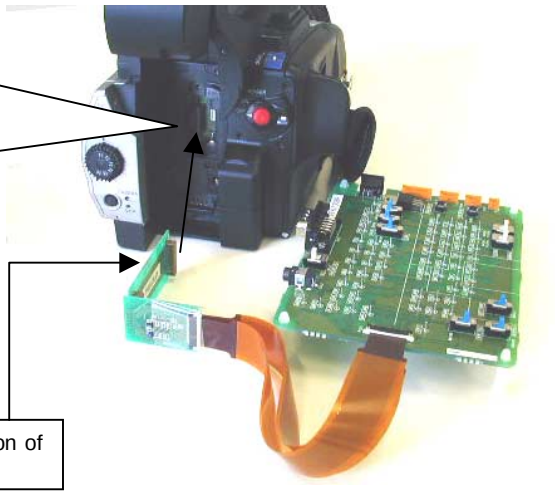


2. Connect the 2 pcs. of 30 pin flat cables (VFK1317) between P101/P102 on the Measuring Board (VFK1308P), and 2 connectors on the EVR Connector Board (VFK1309A). Make sure that the contact surface of 2 pcs. of 30 pin Flat Cables are inner side and direction of the EVR Connector Board is as shown in Figures. Then connect the Extender board (VFK1694).



3. Connect the EVR Extender board (VFK1694) to EVR connector on EVR connect C.B.A. in AG-DVX100. Then make sure that the direction of the Extender Board is correct as shown in Figure.





When the VFK1694 connect to EVR connector, be careful direction of VFK1694. Please follow as shown in the figure.

4. Supply DC6V to the Measuring Board (VFK1308P). Please use the DC cable (VJA0941) and AC Adaptor to supply DC voltage to Measuring Board.
5. Connect a 9 pin RS-232C cable between the Measuring Board and RS-232C connector on Personal Computer as shown in Figure.
6. Unless otherwise specified on the message of the EVR software or this adjustment procedure, set the switches on the Measuring Board as shown in the table below.

NAME	SETTING POSITION
RS232C SEL(SW101)	D-SUB
VTR TEST(SW103)	NORMAL
BST TEST(SW104)	NORMAL
SW107	CENTER position
SW108	H
SW105	H
SW106	OFF
FLUSH1 (SW102)	NORMAL
FLUSH2 (SW109)	NORMAL

2. REQUIRED TOOL & EQUIPMENT FOR ELECTRICAL ADJUSTMENT

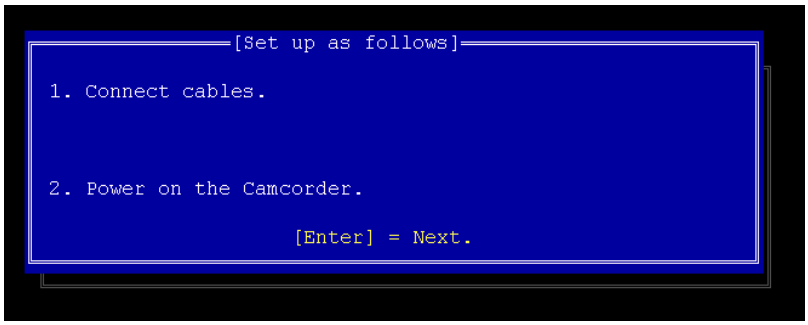
Below indicated tool are required to perform each adjustment except tools introduced item1.

Adjustment	Item	Required Tool
Camera	Hall Amp (Auto)	Unnecessary
	Iris PWM (Auto)	Unnecessary
	OIS (Auto)	Unnecessary
	Zoom Tracking (Auto)	72mm Attachment Ring (VFK1809) 43mm Attachment Ring (VFK1164TAR43) Collimator (VFK1164TCM01)
	White Balance (3100K)	Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (5100K)	CC filter (LB120) (VFK1347) CC filter (LBA2) CC filter (80D) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (4500K)	CC filter (LB120) (VFK1347) CC filter (LBB1) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (3600K)	CC filter (LB40) (VFK1341) CC filter (LBB2) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	CCD White scratch damage revision (Auto)	Unnecessary
	White Shading	Halogen lamp
VTR	Sensitivity adj of Tape sensor (Auto)	Tape End/Beg. Sensor Cassette (VFK1217)
	PG Shifter (Auto)	Oscilloscope
	Luminance Level	Waveform Monitor
	Chroma Level	Waveform Monitor
LCD	PLL	Oscilloscope
	Pedestal Level	Oscilloscope
	Contrast	Oscilloscope
	Sub Contrast	Oscilloscope
	White balance	Oscilloscope
EVF	PLL	Oscilloscope
	Pedestal Level	Oscilloscope
	Contrast	Oscilloscope
	Sub Contrast	Oscilloscope
	White balance	Oscilloscope

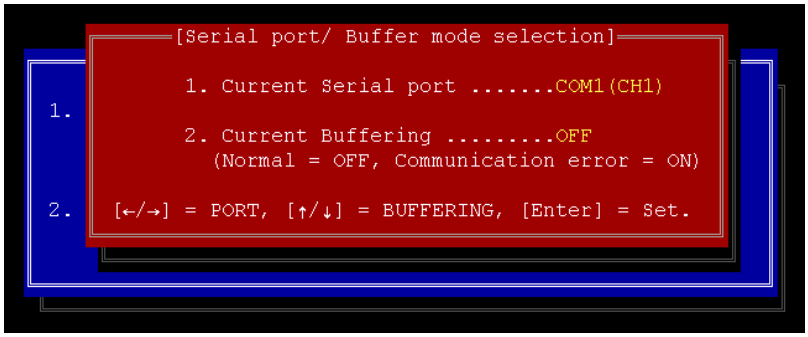
3. PC EVR (ADJUSTMENT) SOFTWARE

3-1. BOOT UP THE ADJUSTMENT SOFTWARE

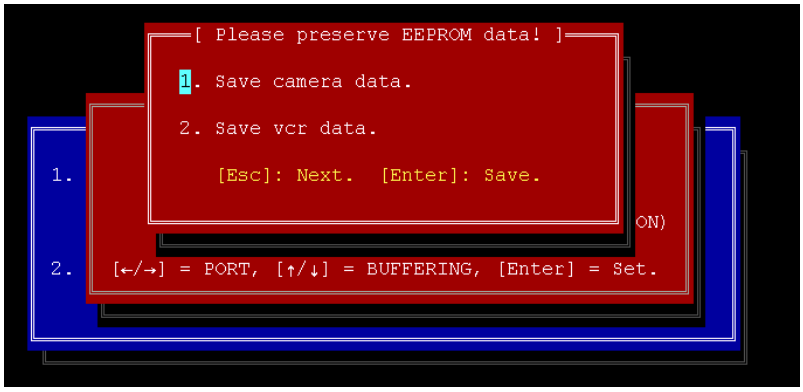
1. Copy all files on the floppy disc (VFK1811: EVR software) to created directly on PC(i.e.; C:¥DVX100).
2. Restart the PC in DOS mode.
3. Type “DVX100” and press ENTER key, then EVR software boot up.
4. Wait for a few seconds so that the EVR adjustment program is started.



PRESS ENTER KEY

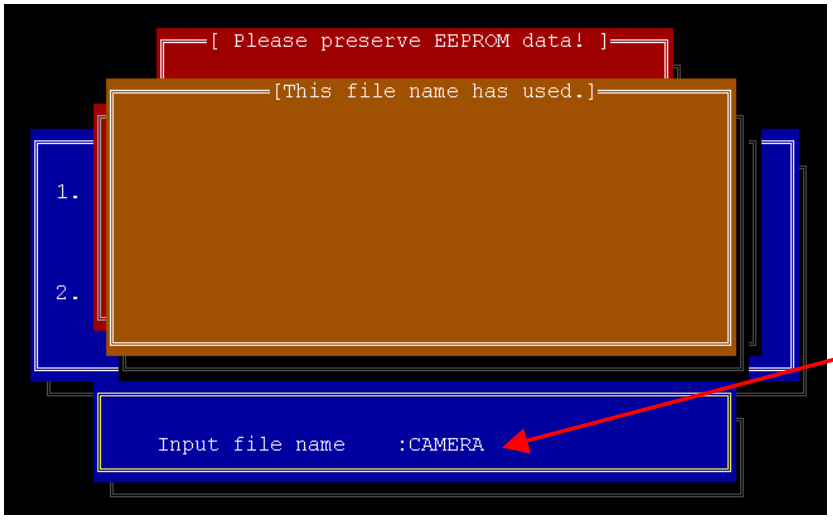

[Serial port/ Buffer mode selection]
1. Current Serial port .....COM1(CH1)
2. Current Buffering .....OFF
(Normal = OFF, Communication error = ON)
[←/→] = PORT, [↑/↓] = BUFFERING, [Enter] = Set.

PRESS ENTER KEY

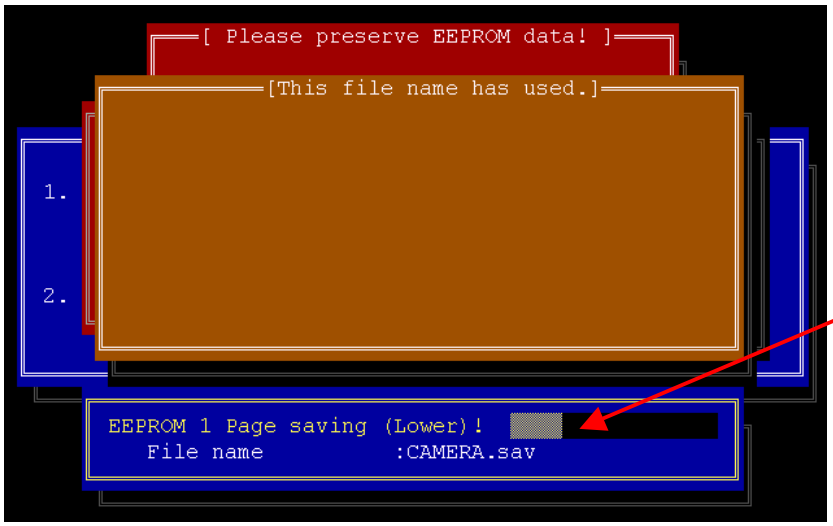


Normally this screen is appeared. We recommended store the EEPROM data before start adjustment. If you want to skip store the data, PRESS ESC KEY, then goes to Main menu.

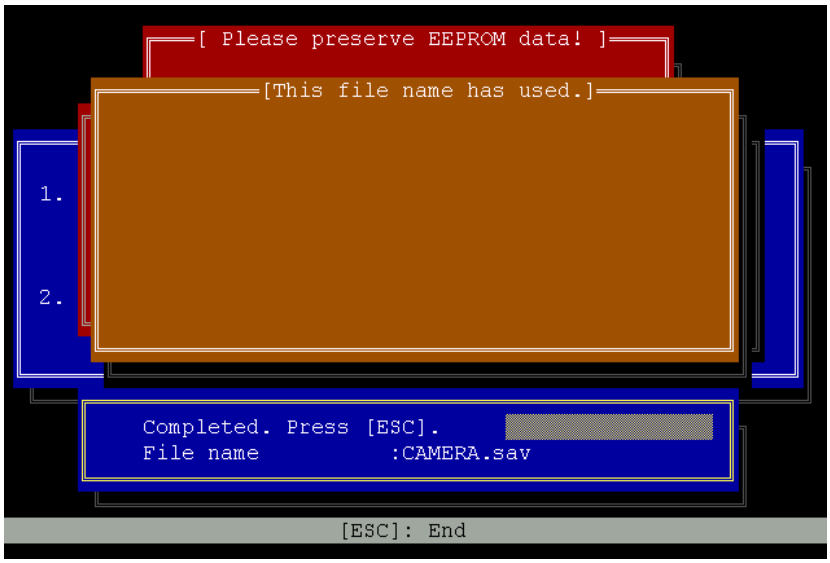
In case of select No.1



Input file name and PRESS ENTER KEY.

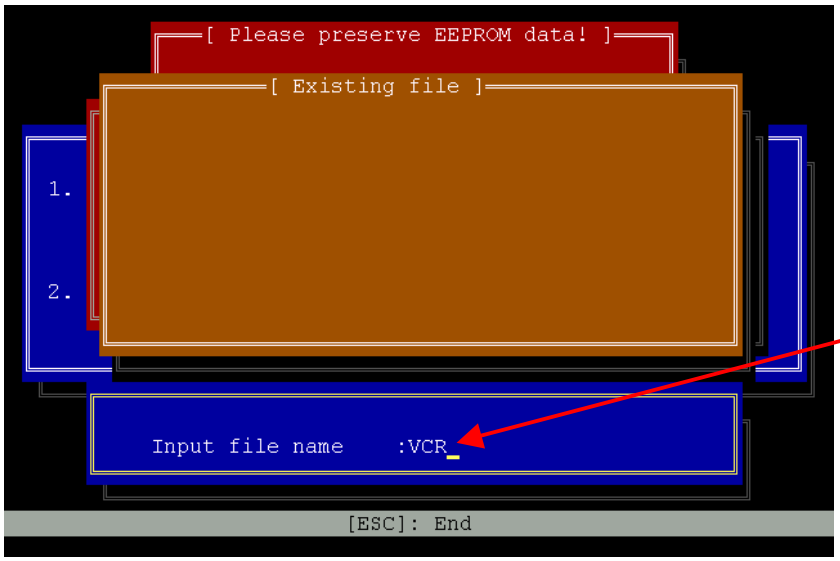


Saving the data is started.

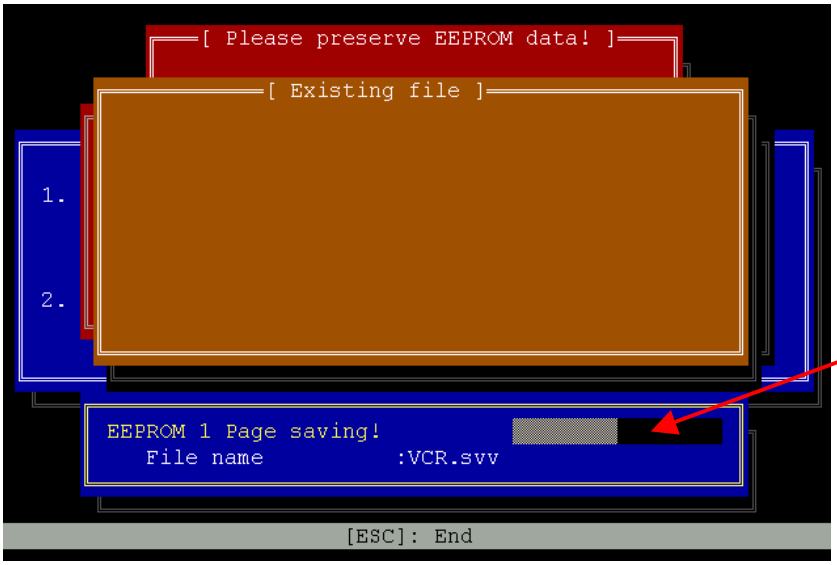


When the data is stored completed, this screen is appeared. PRESS ESC KEY.

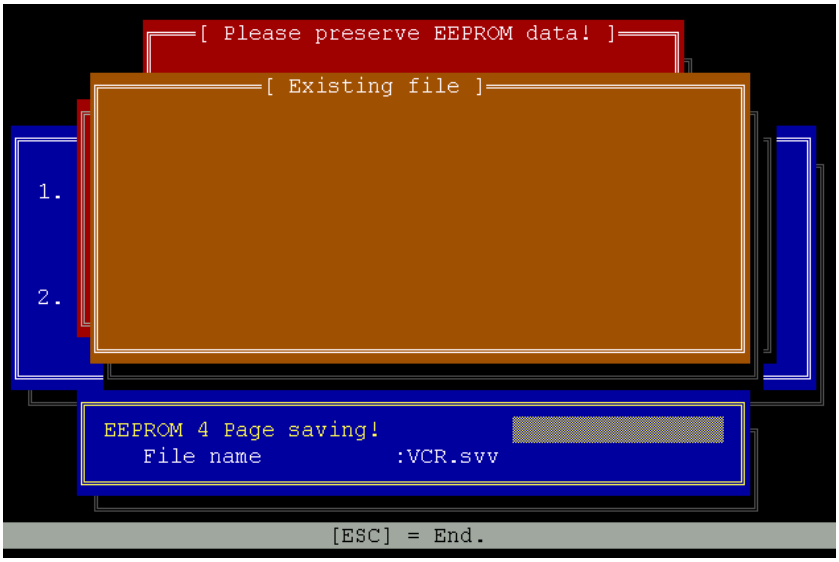
Return to this screen and in case of select No.2. PRESS ENTER KEY.



Input file name and PRESS ENTER KEY.



Saving the data is started.

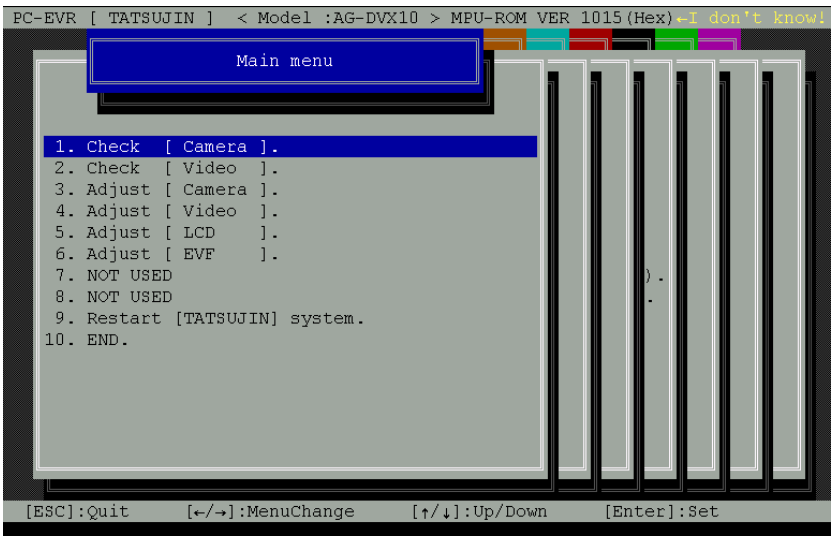


When the data is stored completed, this screen is appeared. PRESS ESC KEY.

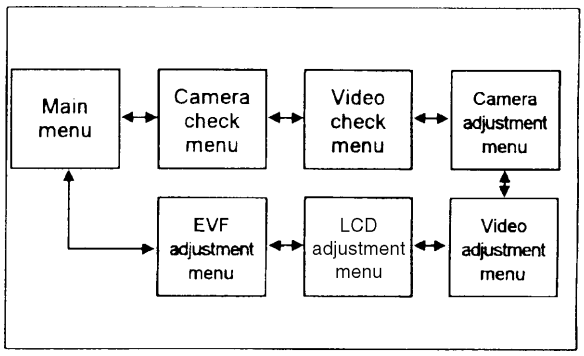
3-2. How to Use the Main Menu

Select a Sub Menu to check, adjust the unit and etc. by pressing ↑↓ (UP/DOWN) Key in Main Menu. Then press "ENTER" Key. the Sub Menu will be displayed.

NOTE: Menu (pages) 3,4,5 and 6 are needed for adjustment.

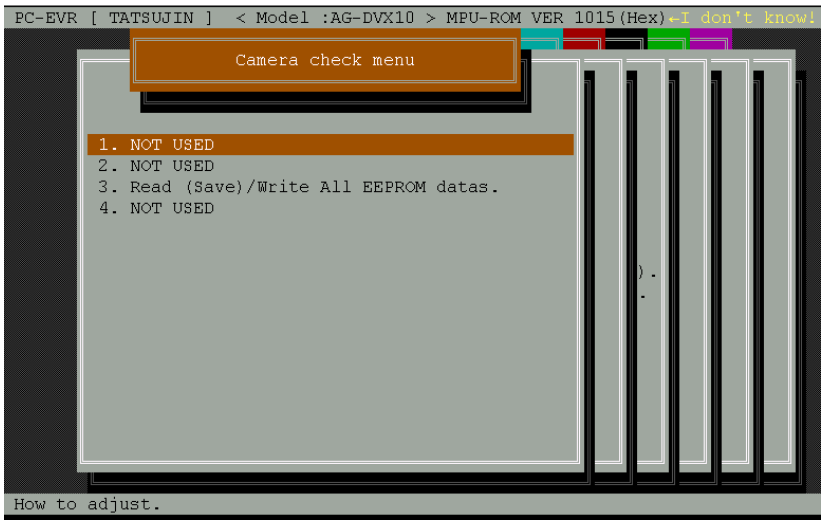

PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Main menu
1. Check [Camera].
2. Check [Video].
3. Adjust [Camera].
4. Adjust [Video].
5. Adjust [LCD].
6. Adjust [EVF].
7. NOT USED
8. NOT USED
9. Restart [TATSUJIN] system.
10. END.
[ESC]:Quit [←/→]:MenuChange [↑/↓]:Up/Down [Enter]:Set

With using ←→ keys, also the menu can be changed.

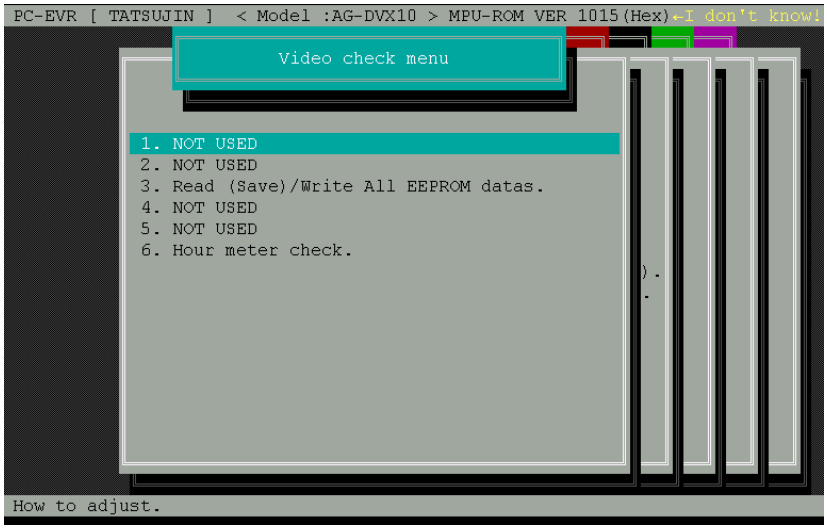


3-3. Introduction of the Sub Menu

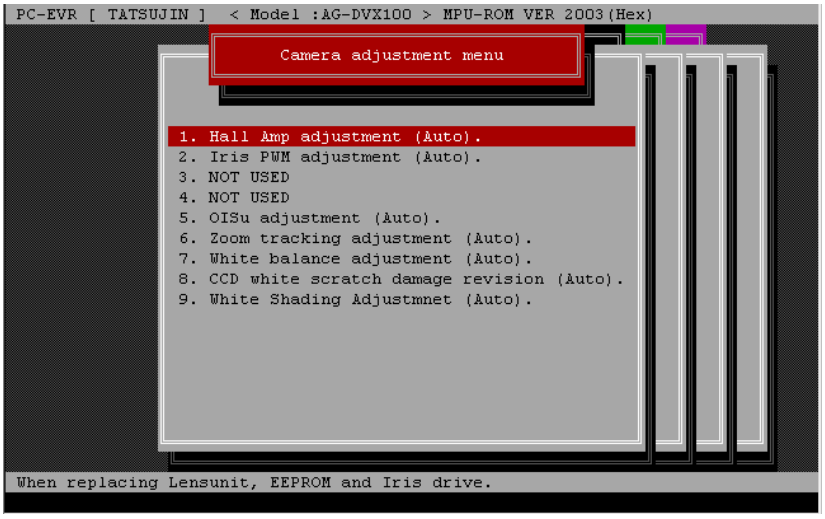
1) Camera Check Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Camera check menu
1. NOT USED
2. NOT USED
3. Read (Save)/Write All EEPROM datas.
4. NOT USED
How to adjust.

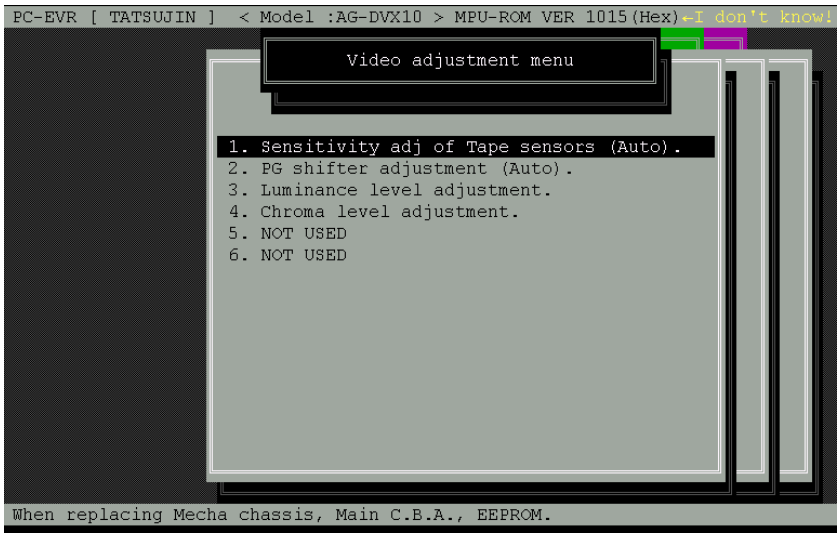
2) Video Check Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Video check menu
1. NOT USED
2. NOT USED
3. Read (Save)/Write All EEPROM datas.
4. NOT USED
5. NOT USED
6. Hour meter check.
How to adjust.

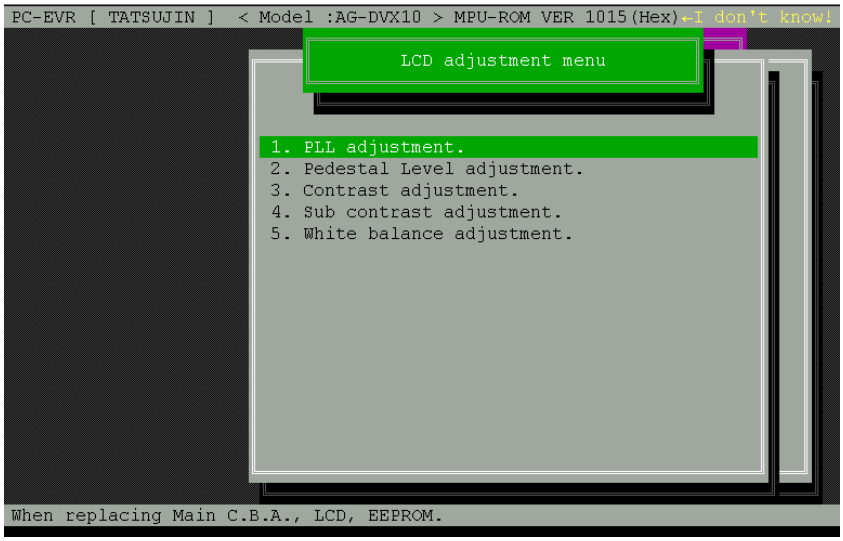
3) Camera Adjustment Menu


PC-EVR [TATSUJIN] < Model :AG-DVX100 > MPU-ROM VER 2003(Hex)
Camera adjustment menu
1. Hall Amp adjustment (Auto).
2. Iris PWM adjustment (Auto).
3. NOT USED
4. NOT USED
5. OISu adjustment (Auto).
6. Zoom tracking adjustment (Auto).
7. White balance adjustment (Auto).
8. CCD white scratch damage revision (Auto).
9. White Shading Adjustmnet (Auto).
When replacing Lensunit, EEPROM and Iris drive.

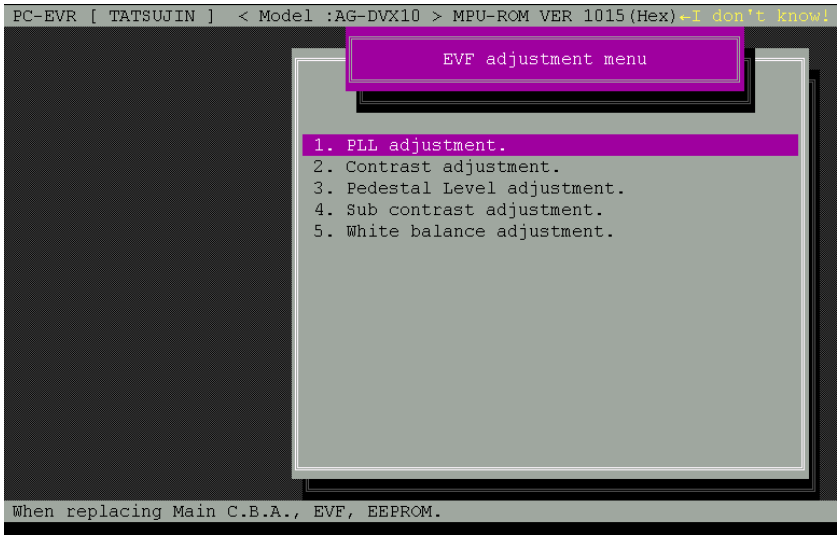
4) Video Adjustment Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Video adjustment menu
1. Sensitivity adj of Tape sensors (Auto).
2. PG shifter adjustment (Auto).
3. Luminance level adjustment.
4. Chroma level adjustment.
5. NOT USED
6. NOT USED
When replacing Mecha chassis, Main C.B.A., EEPROM.

5) LCD Adjustment Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
LCD adjustment menu
1. PLL adjustment.
2. Pedestal Level adjustment.
3. Contrast adjustment.
4. Sub contrast adjustment.
5. White balance adjustment.
When replacing Main C.B.A., LCD, EEPROM.

6) EVF Adjustment Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
EVF adjustment menu
1. PLL adjustment.
2. Contrast adjustment.
3. Pedestal Level adjustment.
4. Sub contrast adjustment.
5. White balance adjustment.
When replacing Main C.B.A., EVF, EEPROM.

4. EEPROM

All adjustment data has been stored in the EEPROM.
There are two EEPROM in this unit as shown in the table below.

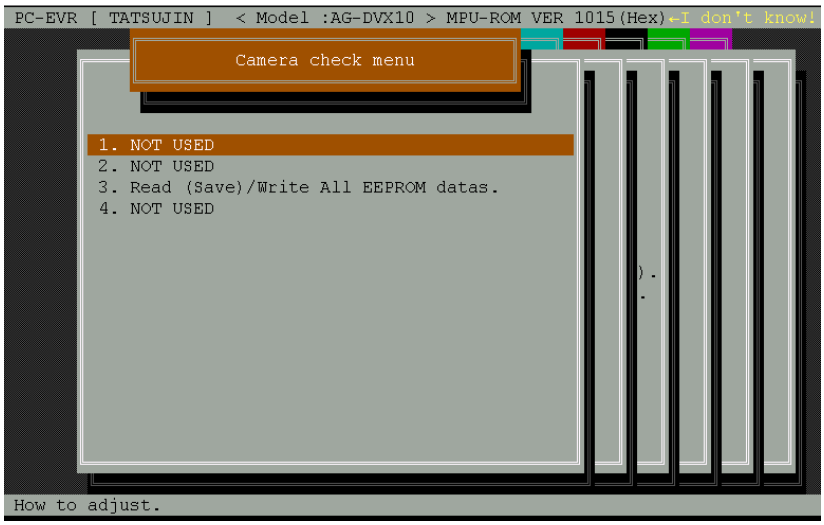
EEPROM LOCATION

C.B.A.	EEPROM IC Ref.No.
Camera C.B.A.	IC307
VTR C.B.A.	IC2008

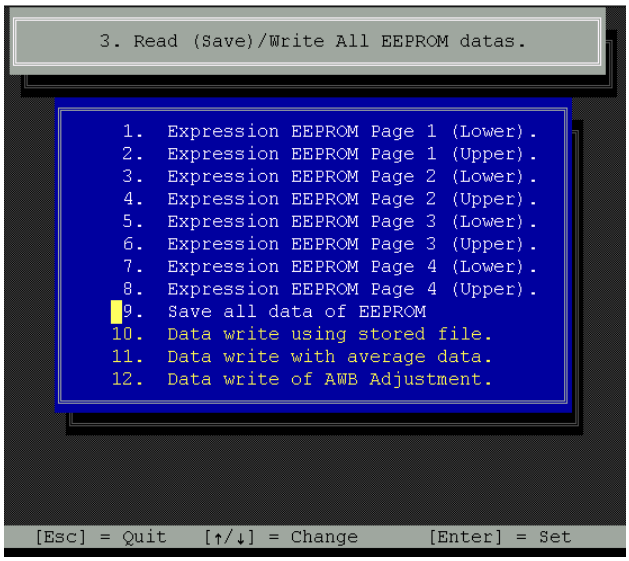
NOTE:
Be sure to save both the EEPROM data into the personal computer before performing service and adjustment, in order to avoid any accidental data loss.

4-1. How to Save Camera EEPROM Data

1) Select “1.Check [Camera].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Camera check menu, and then press the “Enter” key.


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Camera check menu
1. NOT USED
2. NOT USED
3. Read (Save)/Write All EEPROM datas.
4. NOT USED
How to adjust.

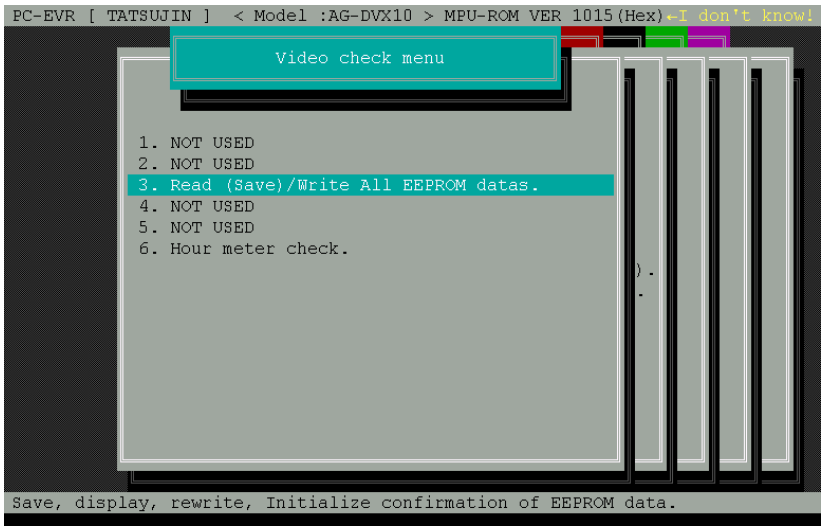
3) Select “9.Save all data of EEPROM” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.


3. Read (Save)/Write All EEPROM datas.
1. Expression EEPROM Page 1 (Lower).
2. Expression EEPROM Page 1 (Upper).
3. Expression EEPROM Page 2 (Lower).
4. Expression EEPROM Page 2 (Upper).
5. Expression EEPROM Page 3 (Lower).
6. Expression EEPROM Page 3 (Upper).
7. Expression EEPROM Page 4 (Lower).
8. Expression EEPROM Page 4 (Upper).
9. Save all data of EEPROM
10. Data write using stored file.
11. Data write with average data.
12. Data write of AWB Adjustment.
[Esc] = Quit [↑/↓] = Change [Enter] = Set

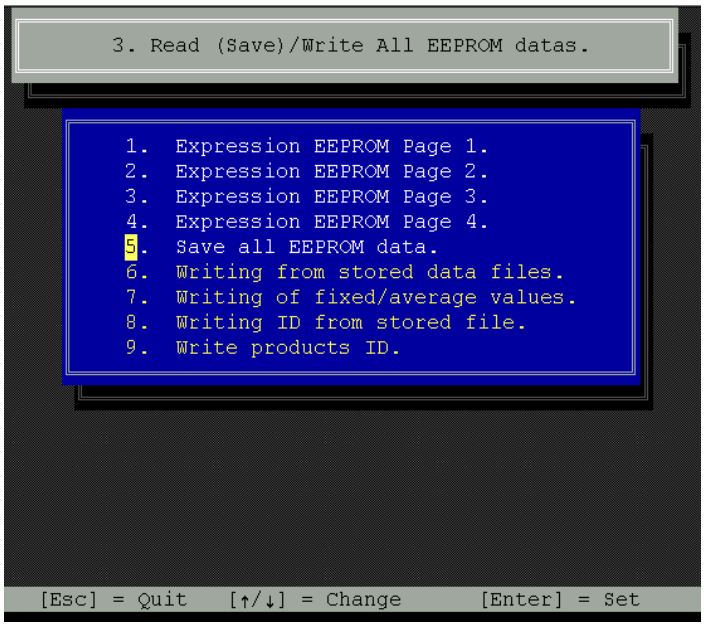
4) Type the File name and, then press the “Enter” key. The data of EEPROM (IC307) can be stored in the personal computer. (Please refer to item “2-1. BOOT UP THE ADJUSTMENT SOFTWARE”)

4-2. How to Save VTR EEPROM Data

1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Video check menu, and then press the “Enter” key.


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Video check menu
1. NOT USED
2. NOT USED
3. Read (Save)/Write All EEPROM datas.
4. NOT USED
5. NOT USED
6. Hour meter check.
Save, display, rewrite, Initialize confirmation of EEPROM data.

3) Select “5.Save all EEPROM data” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.


3. Read (Save)/Write All EEPROM datas.
1. Expression EEPROM Page 1.
2. Expression EEPROM Page 2.
3. Expression EEPROM Page 3.
4. Expression EEPROM Page 4.
5. Save all EEPROM data.
6. Writing from stored data files.
7. Writing of fixed/average values.
8. Writing ID from stored file.
9. Write products ID.
[Esc] = Quit [↑/↓] = Change [Enter] = Set

4) Type the File name, and then press the “Enter” key. The data of EEPROM (IC2008) will be stored in the personal computer.

4-3. REWRITE Saved Data

When Camera or VTR C.B.A is replaced, It becomes impossible to adjustment or repairing during service operation, rewrite the saved data which is stored in EEPROM as follows. And readjust.

4-3-1. How to Rewrite EEPROM data on Camera C.B.A.

1) Select “1.Check [Camera].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Camera check menu, and then press the “Enter” key.
3) Select “10.Data write using stored file” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.
4) Type the saved file name, and then press the “Enter” key.
5) Select “9.EEPROM ALL (2 Kbyte)” , and then press the “Enter” key.
6) The data can be written in EEPROM (IC307).

4-3-2. How to Rewrite EEPROM data on VTR C.B.A.

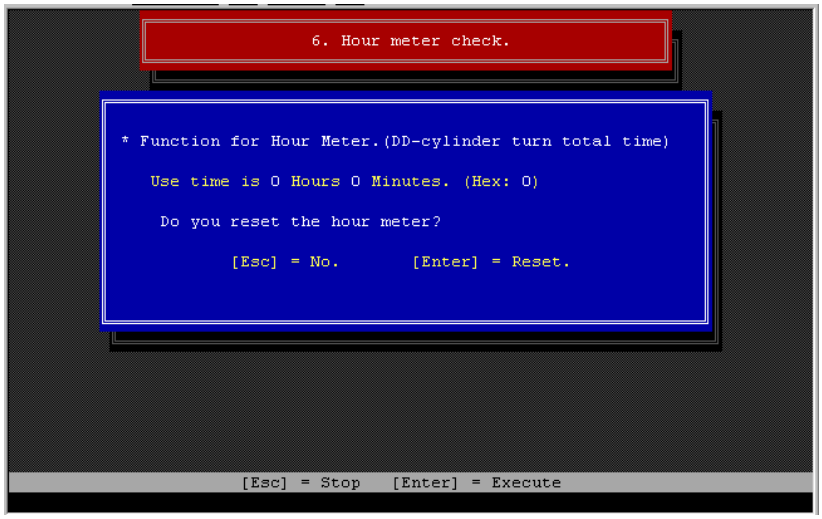
1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Video check menu, and then press the “Enter” key.
3) Select “3.Writing from the stored data files” in the Read [Save]/Write All EEPROM data menu, and then press “Enter” key.
4) Type the saved file name, and then press the “Enter” key.
5) Select “5.Write EEPROM (1024 byte)” , and then press the “Enter” key.
6) The data can be written in EEPROM (IC2008).

5. HOUR METER RESET

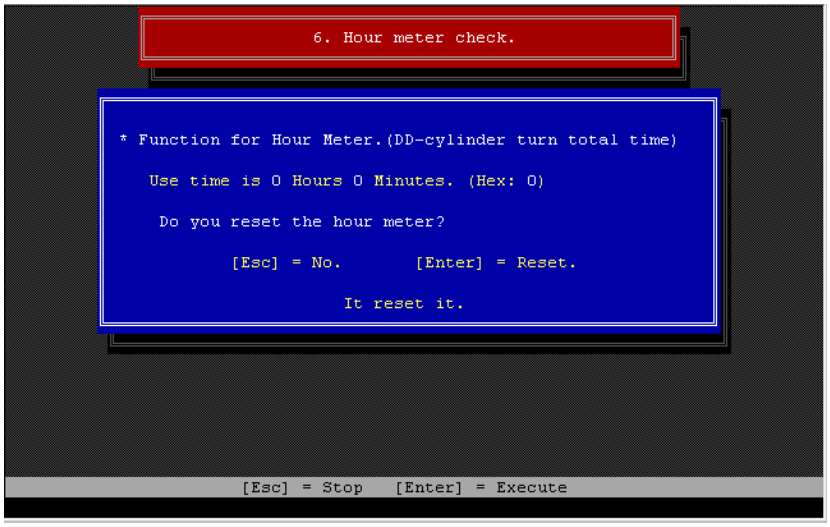
Hour Meter can be reset by use this EVR software.

<How to reset Hour Meter>

1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “6.Hour meter check” in the Video check menu, and then press the “Enter” key.


6. Hour meter check.
* Function for Hour Meter.(DD-cylinder turn total time)
Use time is 0 Hours 0 Minutes. (Hex: 0)
Do you reset the hour meter?
[Esc] = No.
[Enter] = Reset.
[Esc] = Stop
[Enter] = Execute

3) Press the “ENTER” key, then reset is executed.



4) After finish this operation, the program goes to “Video Check Menu” automatically.
5) Open the “OTHER FUNCTION” menu in AG-DVX100 and confirm that the HOUR METER display is change to “00000H”.

6. CAMERA ADJUSTMENT PROCEDURE

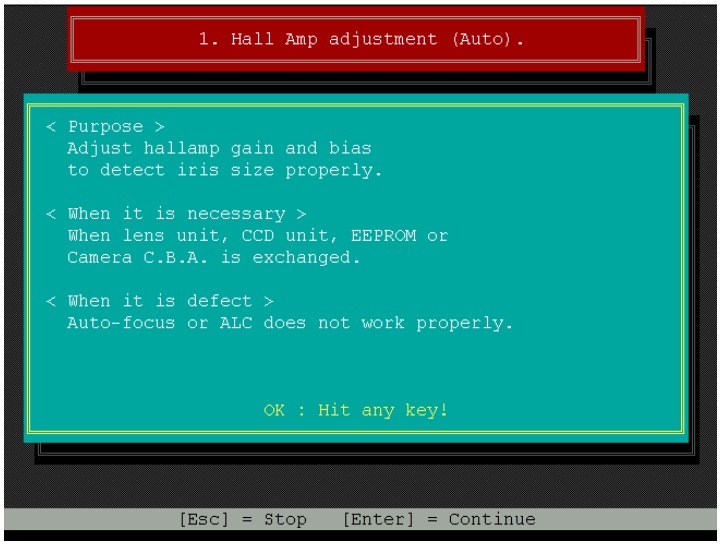
Be sure to save the Camera EEPROM data into the Personal Computer, before performing adjustment.

Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

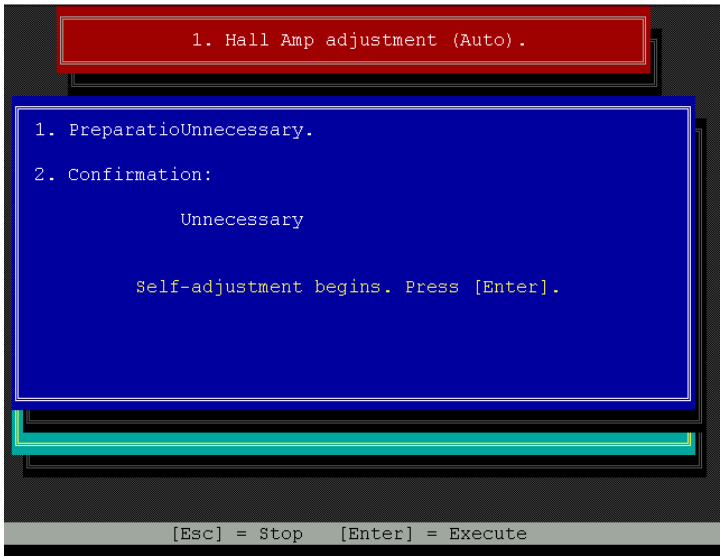
6-1. Hall Amp Adjustment (AUTO)

This adjustment can be adjust automatically.

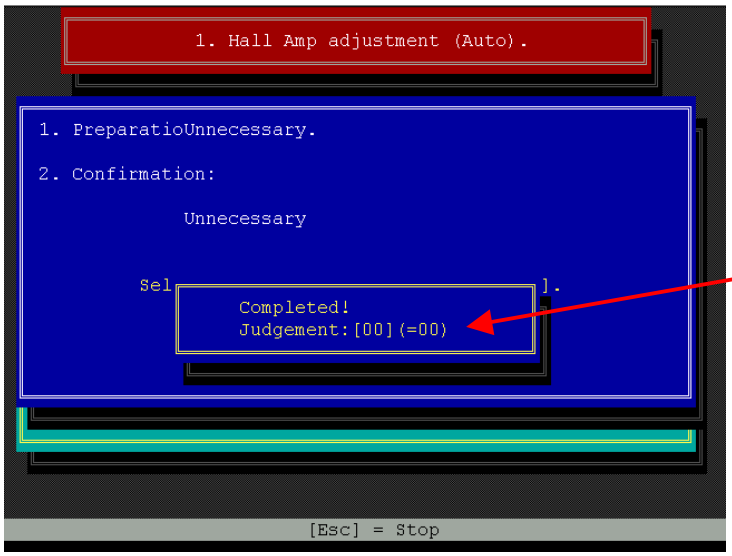
1. Open the “Camera adjustment menu”.
2. Select “1.Hall Amp adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

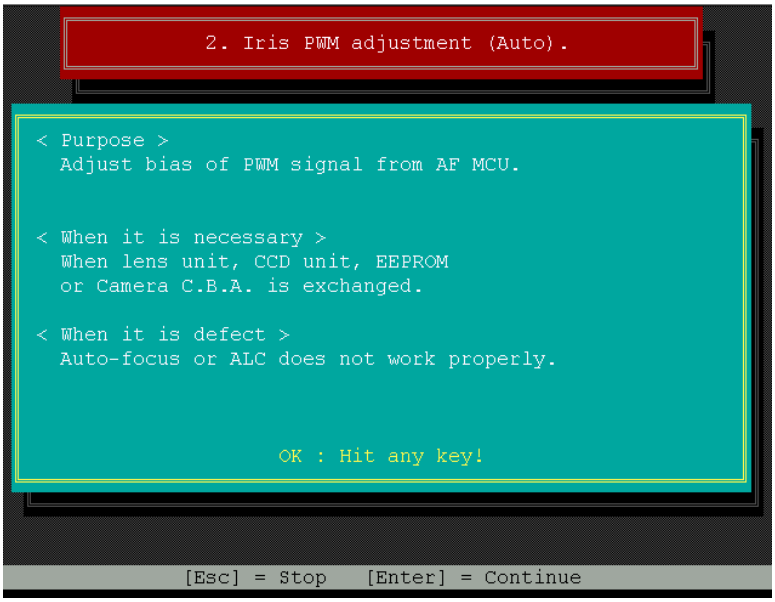


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

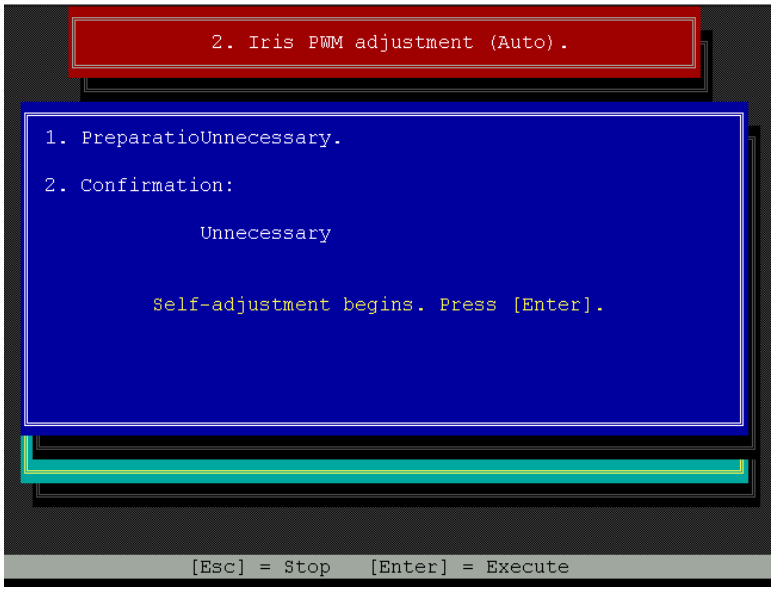
6-2. Iris PWM Adjustment (AUTO)

This adjustment can be adjust automatically.

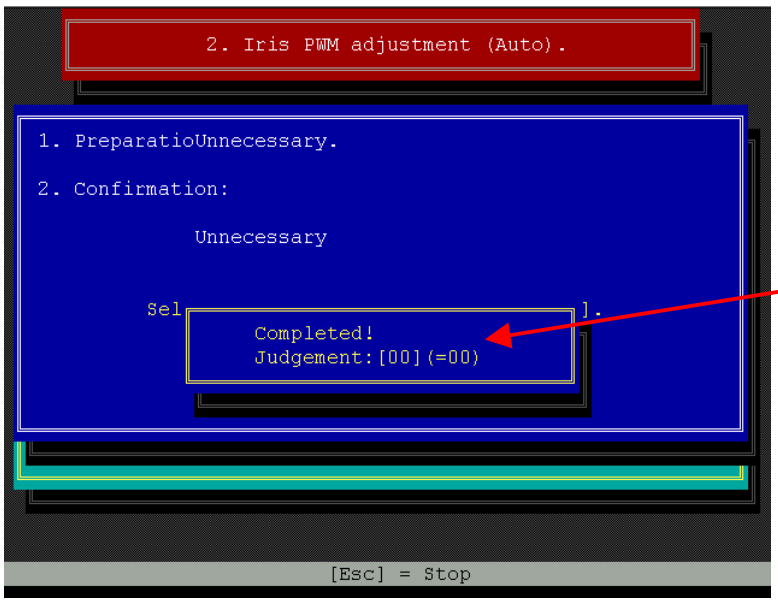
1. Open the “Camera adjustment menu”.
2. Select “2.Iris PWM adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.



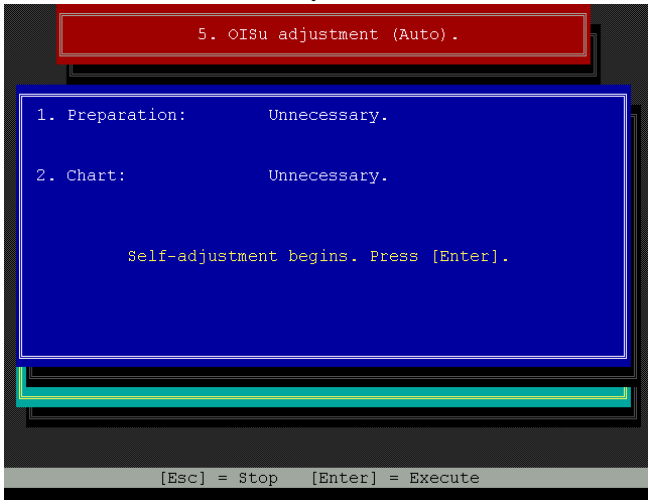
When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

6-3. OISu Adjustment (AUTO)

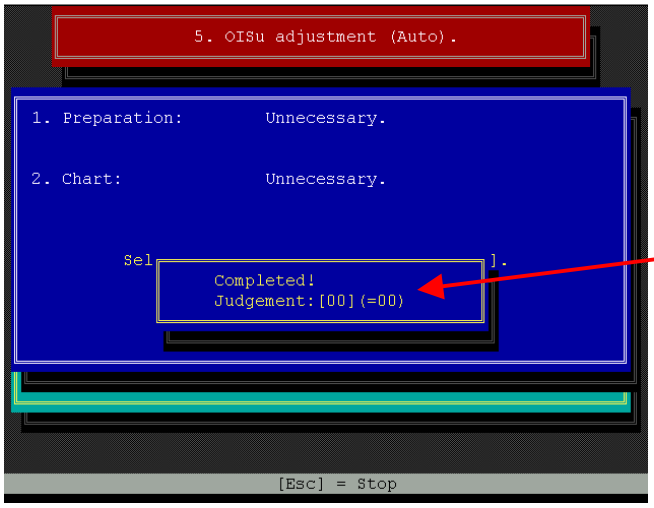
This adjustment can be adjust automatically.

1. Open the “Camera adjustment menu”.
2. Select “5.OISu adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.

PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

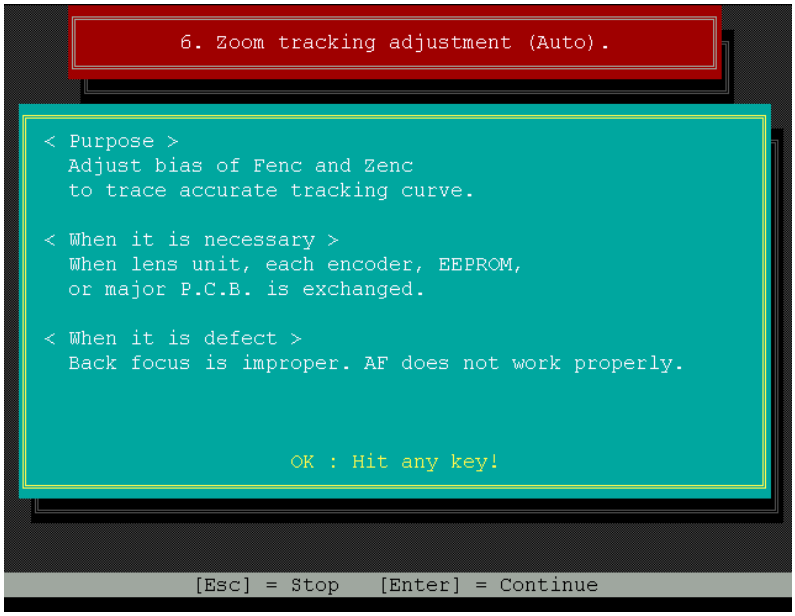


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

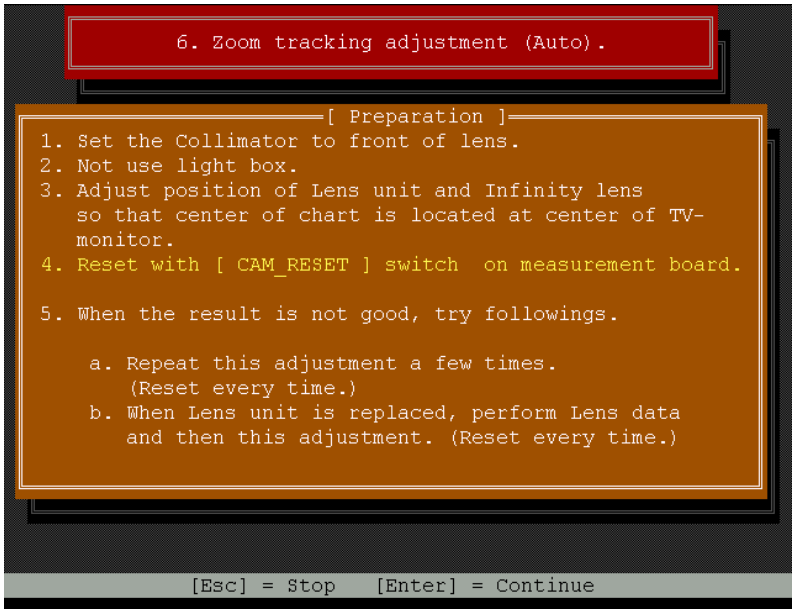
6-4. Zoom Tracking Adjustment (AUTO)

This adjustment can be adjust automatically.

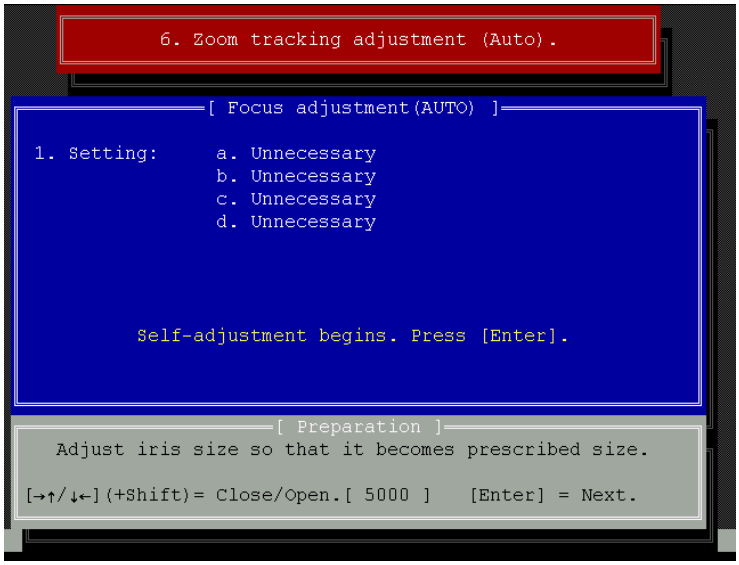
1. Set the 72mm Attachment Ring(VFK1809) to front of the Lens.
2. Set the 43mm attachment ring (VFK1164TAR44) to Collimator (VFK1164TCM01).
3. Set the Collimator (VFK1164TCM01) with the 43mm attachment ring (VFK1164TAR44) to 72mm Attachment Ring(VFK1809).
4. Open the “Camera adjustment menu”.
5. Select “6.Zoom Tracking adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
6. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.


6. Zoom tracking adjustment (Auto).
< Purpose >
Adjust bias of Fenc and Zenc
to trace accurate tracking curve.
< When it is necessary >
When lens unit, each encoder, EEPROM,
or major P.C.B. is exchanged.
< When it is defect >
Back focus is improper. AF does not work properly.
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

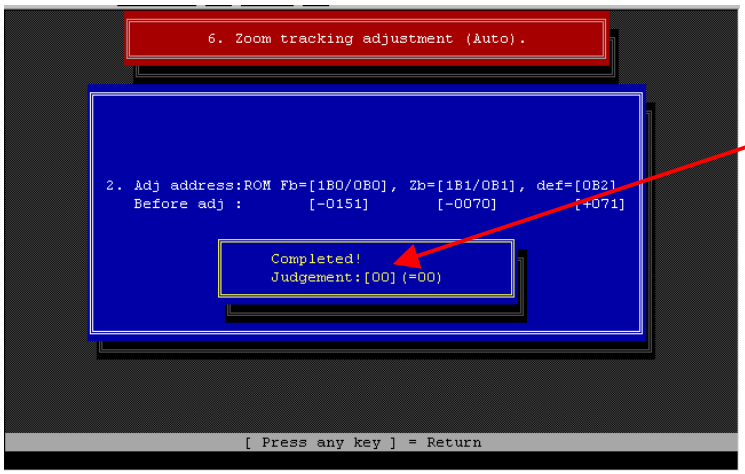
PRESS ENTER KEY.


6. Zoom tracking adjustment (Auto).
[Preparation]
1. Set the Collimator to front of lens.
2. Not use light box.
3. Adjust position of Lens unit and Infinity lens
so that center of chart is located at center of TV-
monitor.
4. Reset with [CAM_RESET] switch on measurement board.
5. When the result is not good, try followings.
a. Repeat this adjustment a few times.
(Reset every time.)
b. When Lens unit is replaced, perform Lens data
and then this adjustment. (Reset every time.)
[Esc] = Stop [Enter] = Continue

PRESS ENTER KEY.


6. Zoom tracking adjustment (Auto).
[Focus adjustment(AUTO)]
1. Setting: a. Unnecessary
b. Unnecessary
c. Unnecessary
d. Unnecessary
Self-adjustment begins. Press [Enter].
[Preparation]
Adjust iris size so that it becomes prescribed size.
[→↑/↓←](+Shift)= Close/Open.[5000] [Enter] = Next.

PRESS ENTER KEY, then adjustment is started.


6. Zoom tracking adjustment (Auto).
2. Adj address:ROM Fb=[1B0/0B0], Zb=[1B1/0B1], def=[0B2]
Before adj : [-0151] [-0070] [+071]
Completed!
Judgement:[00](=00)
[Press any key] = Return

When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

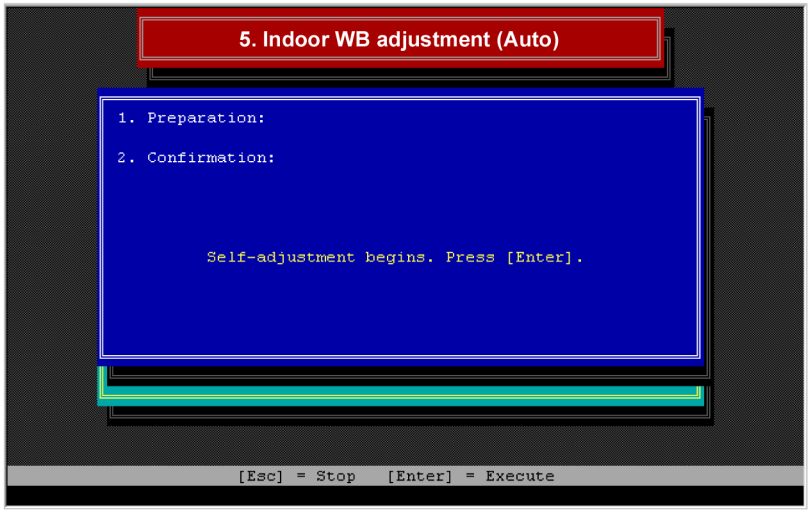
7. After finish this adjustment, press “CAM RESET” switch on Measuring Board(VFK1308P).
NOTE: Please perform this adjustment twice.
8. Confirm that the AG-DVX100 set to Auto Focus mode.
9. Connect the VIDEO OUT to Monitor TV.
9. Press the Zoom button to set maximum TELE side.
10. Confirm that the focus chart appeared clear and Numerical value of Focus control information display. (The value should be appeared “AF95 +/- 1”
11. Set the AG-DVX100 to manual focus mode.
12. Press the Zoom button to change zoom position to maximum WIDE from maximum TELE side, then confirm that the focus chart appeared clear and Zoom position display number changed smoothly.

6-5. White Balance Adjustment (AUTO)

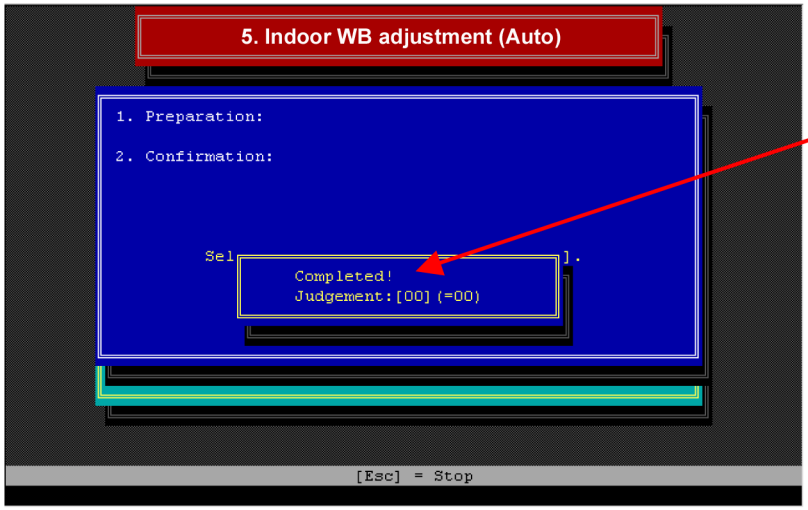
This adjustment can be adjust automatically.
Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.
<Preparation>
1. Set the ND FILTER SW to 1/8 position.
2. Set the DVX100 to ATW mode.
3. Execute the ABB.

6-5-1. Indoor (3100K) White Balance Adjustment (AUTO)

1. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
2. Open the “Camera adjustment menu”.
3. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
4. Select “5.Indoor (3100K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY, then adjustment is started.

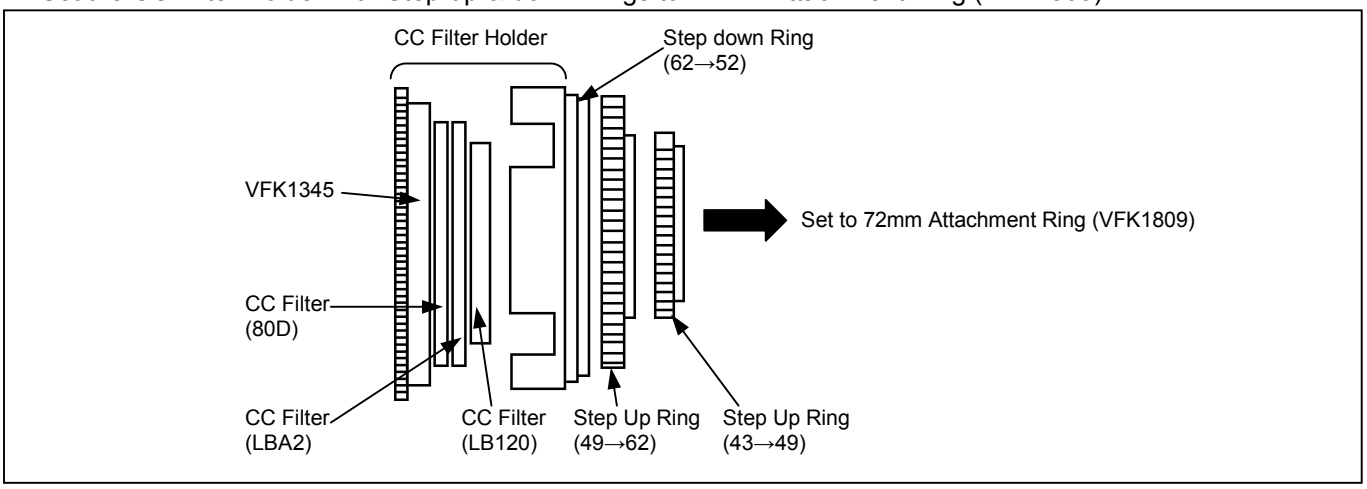


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

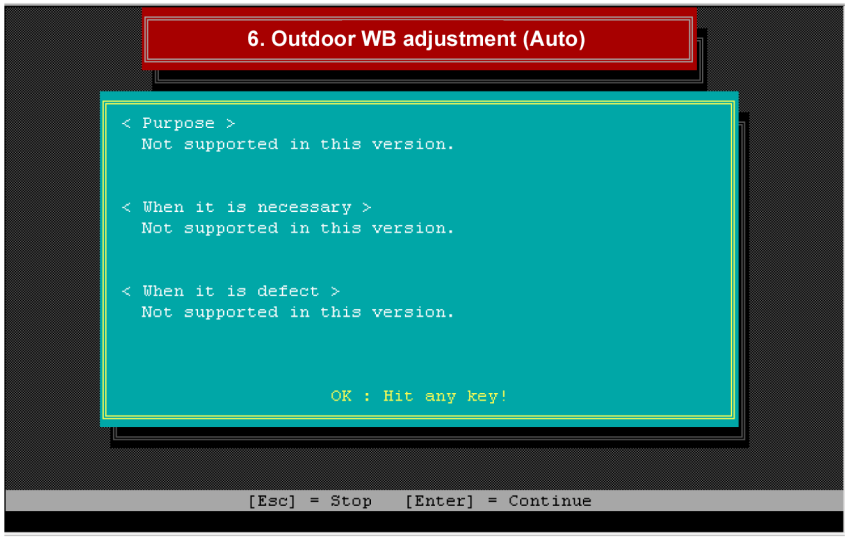
5. Press the “CAM_RESET” SW on VFK1308P and then press the “Enter” key.

6-5-2. Outdoor (5100K) White Balance Adjustment (Auto)

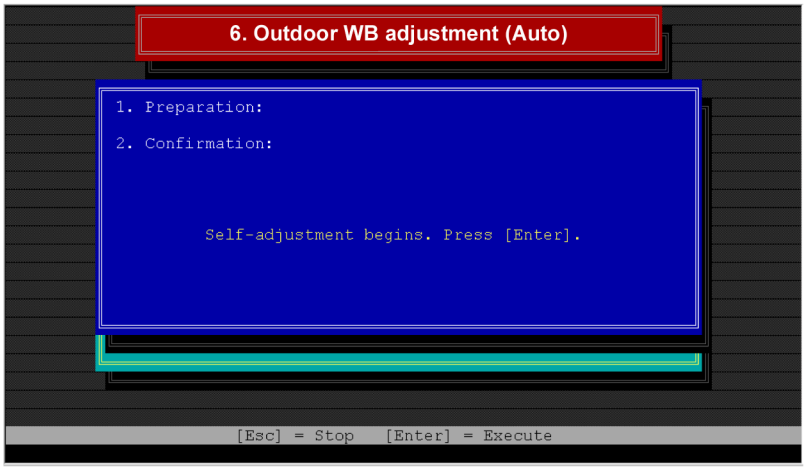
1. Set the Color Conversion filters (LB120 : VFK1347), (LBA2) and (80D) to CC Filter Holder(VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



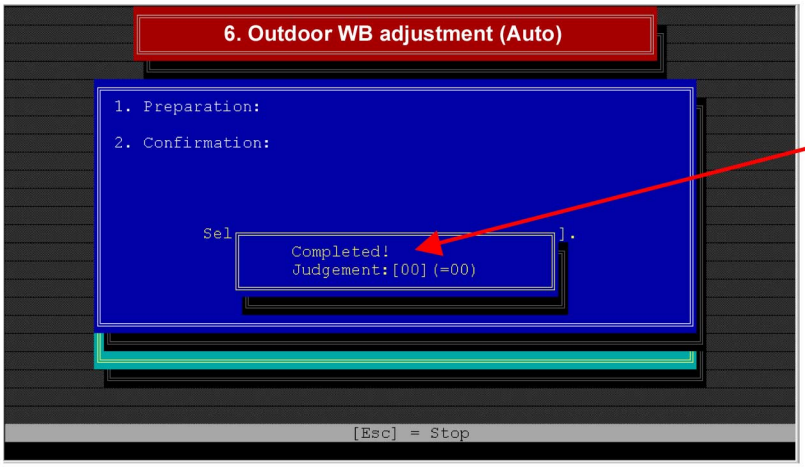
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “6.Outdoor (5100K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

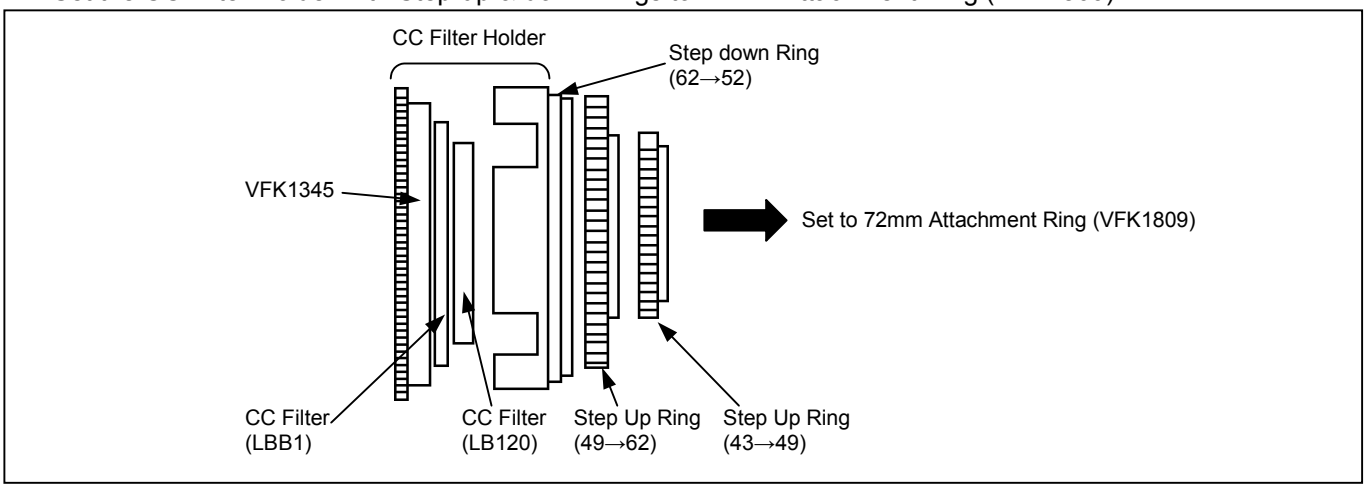


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

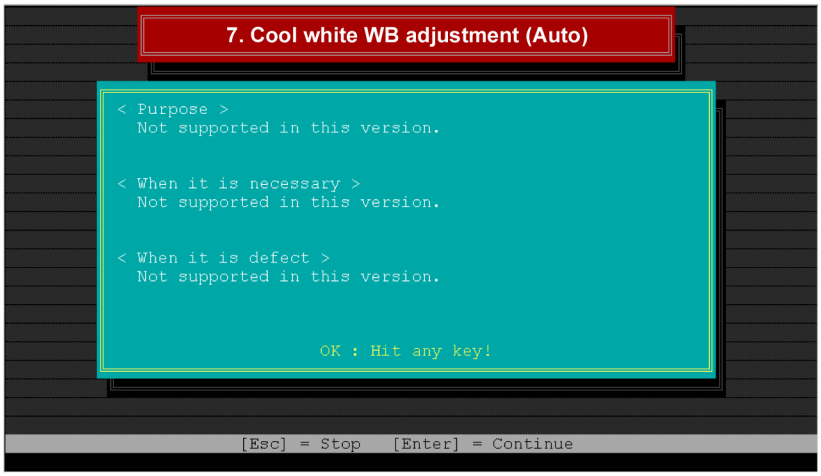
9. Press the “CAM_RESET” SW on VFK1308P , and then press the “Enter” key.

6-5-3. Cool white (4500K) White Balance Adjustment (Auto)

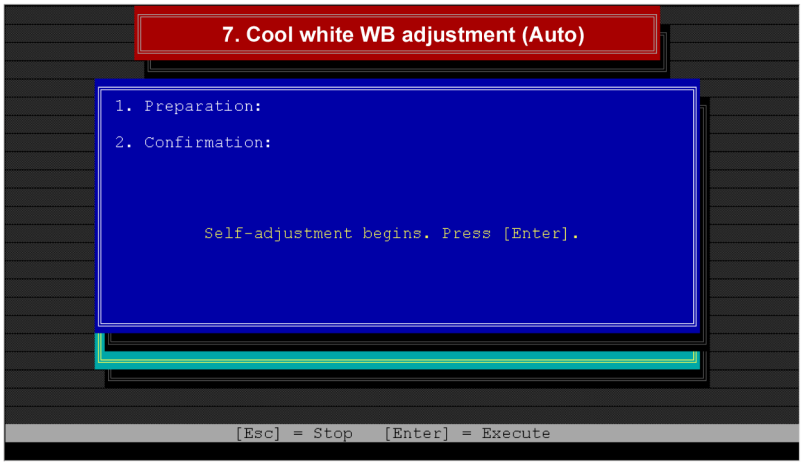
1. Set the Color Conversion filters (LB120 : VFK1347) and (LBB1) to CC Filter Holder (VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



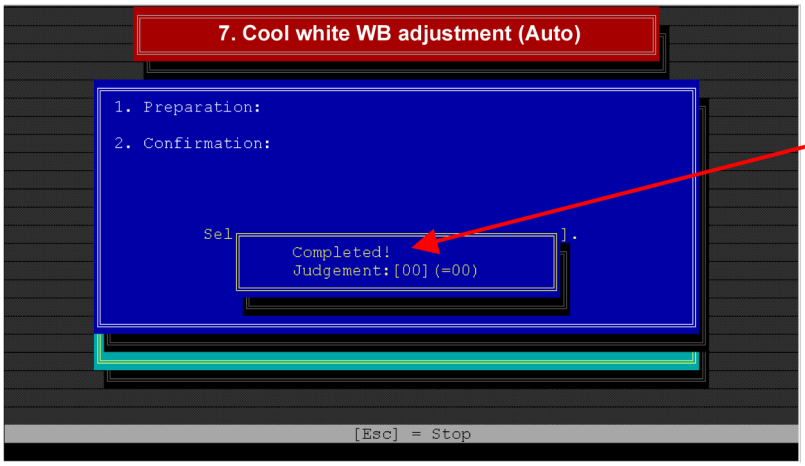
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “7.Cool white (4500K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.


7. Cool white WB adjustment (Auto)
1. Preparation:
2. Confirmation:
Self-adjustment begins. Press [Enter].
[Esc] = Stop [Enter] = Execute

PRESS ENTER KEY, then adjustment is started.

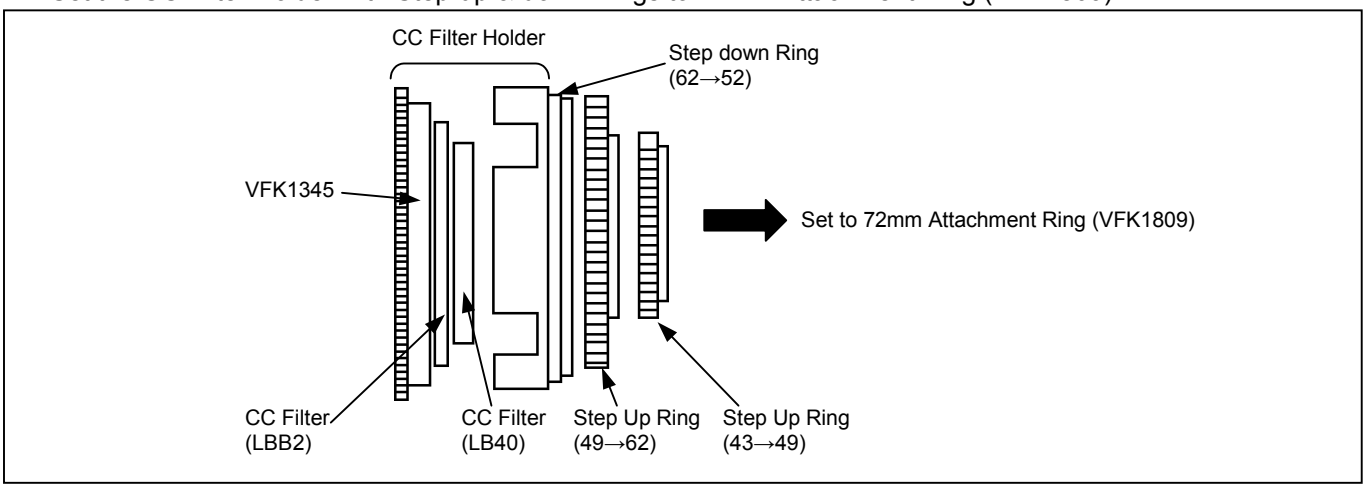


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

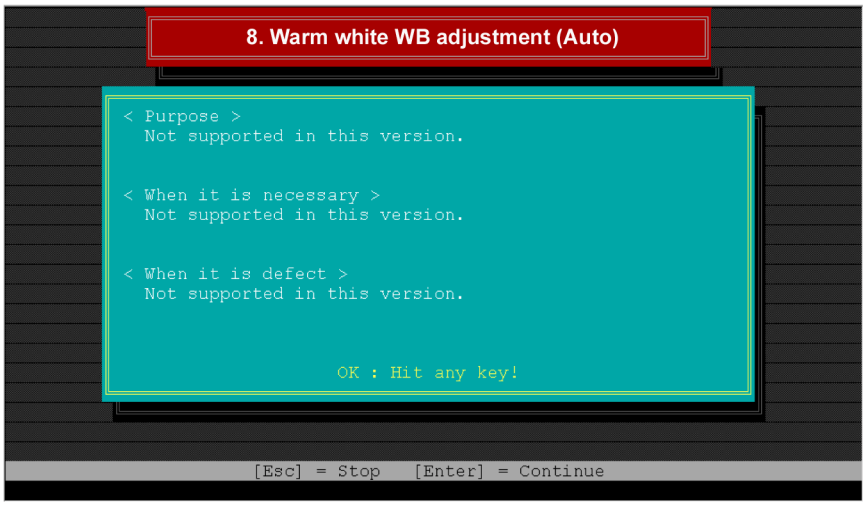
9. Press the “CAM_RESET” SW on VFK1308P, and then press the “Enter” key.

6-5-4. Wram white (3600K) White Balance Adjustment (Auto)

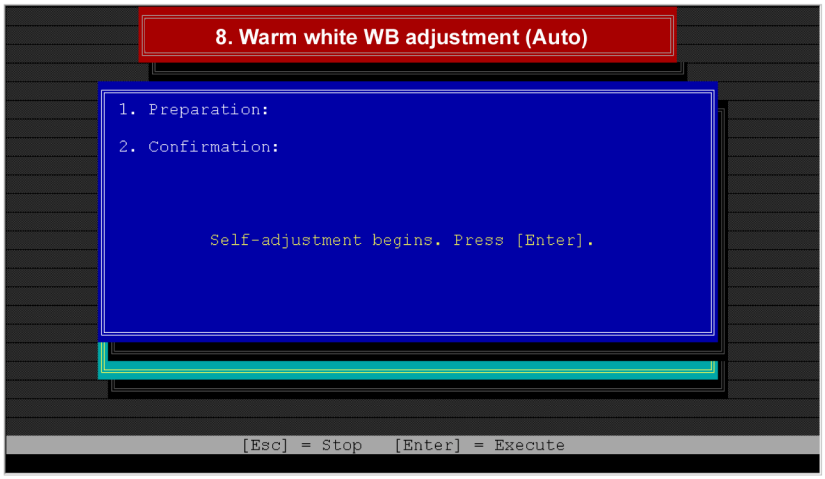
1. Set the Color Conversion filters (LB40 : VFK1341) and (LBB2) to CC Filter Holder (VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



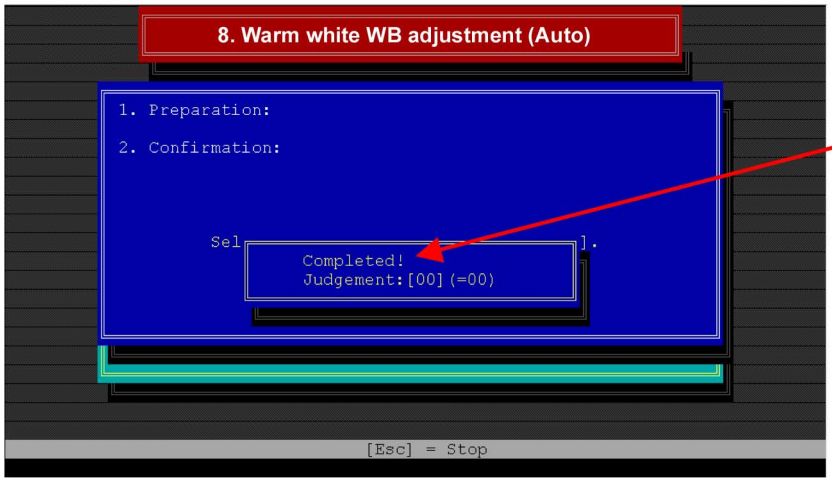
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “8.Wram white (3600K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.


8. Warm white WB adjustment (Auto)
1. Preparation:
2. Confirmation:
Self-adjustment begins. Press [Enter].
[Esc] = Stop [Enter] = Execute

PRESS ENTER KEY, then adjustment is started.



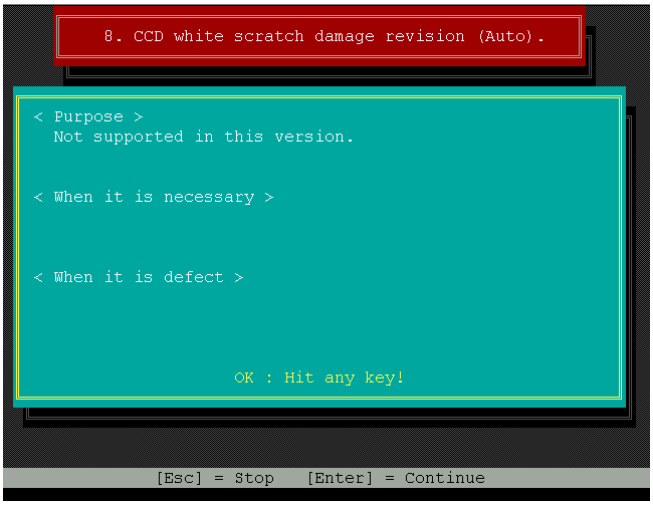
When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

9. Press the “CAM_RESET” SW on VFK1308P, and then press the “Enter” key.

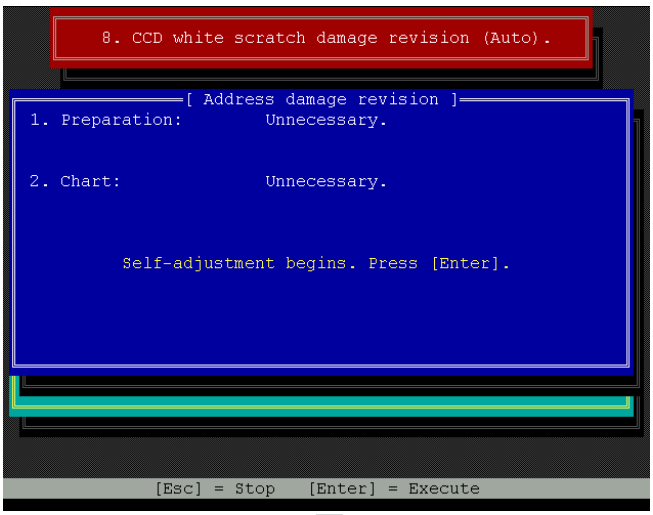
6-6. CCD white scratch damage revision Adjustment (AUTO)

This adjustment can be adjust automatically.

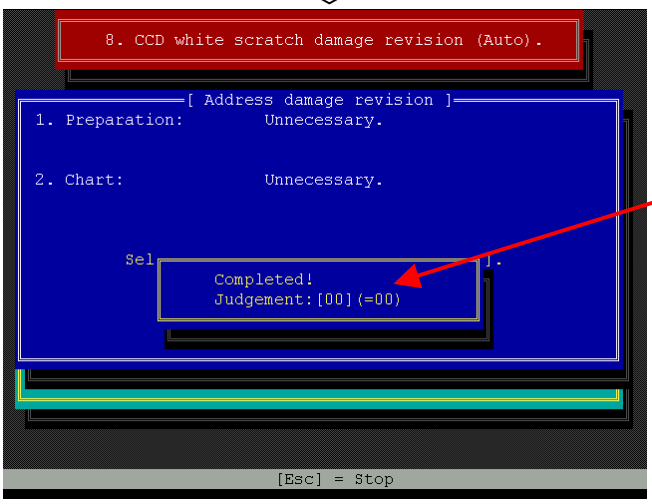
1. Open the “Camera adjustment menu”.
2. Select “8.CCD white scratch damage revision adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.


8. CCD white scratch damage revision (Auto).
[Address damage revision]
1. Preparation: Unnecessary.
2. Chart: Unnecessary.
Self-adjustment begins. Press [Enter].
[Esc] = Stop [Enter] = Execute

PRESS ENTER KEY, then adjustment is started.

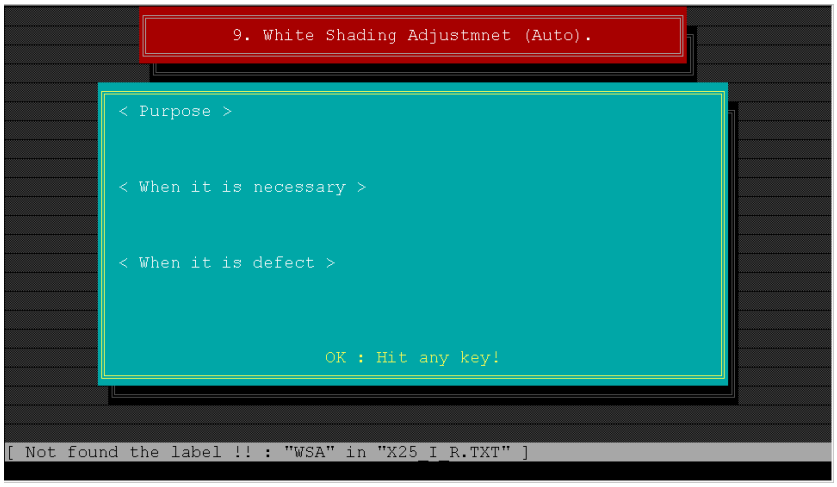


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

6-7. White Shading Adjustment

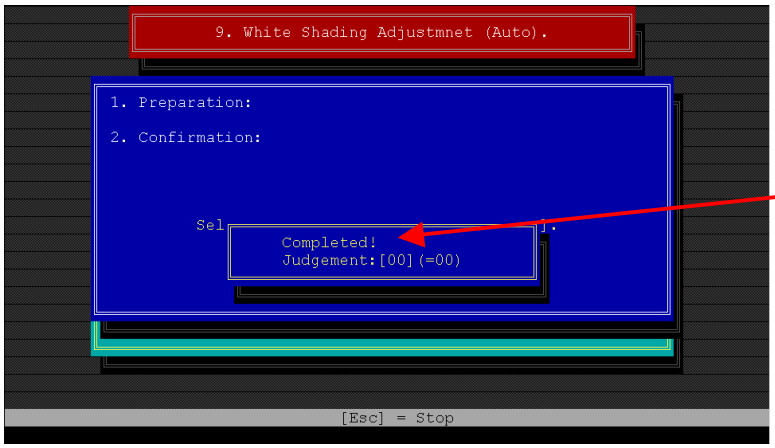
This adjustment can be adjust automatically.

1. Set the GAIN SW to L (0dB) of AG-DVX100.
2. Open the SW mode menu in CAMERA menu.
3. Select the item “ATW” and set to OFF.
4. Open the SCENE FILE menu in CAMERA menu.
5. Confirm that the set to OFF on item PROGRESSIVE in SCENE FILE menu.
6. Aim the unit at white paper (it can be use clear white paper) under the Halogen lamp condition.
7. Shoot the white paper to become fully screen.
8. Set the White Balance by press AWB SW and confirm that the message “AWB OK” on center of screen.
9. Open the DISPLAY SETUP menu in CAMERA menu.
10. Select the item “MARKER” and set to ON.
11. Press the ZEBRA SW and confirm that the marker is appears on screen.
12. Adjust the Iris dial to the luminance level to become 70 to 80% (luminance level can be confirm by numerical value, which displayed lower left corner of screen.
13. Open the “Camera adjustment menu”.
14. Select “9.White Shading Adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
15. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.

PRESS ENTER KEY, then adjustment is started.



When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

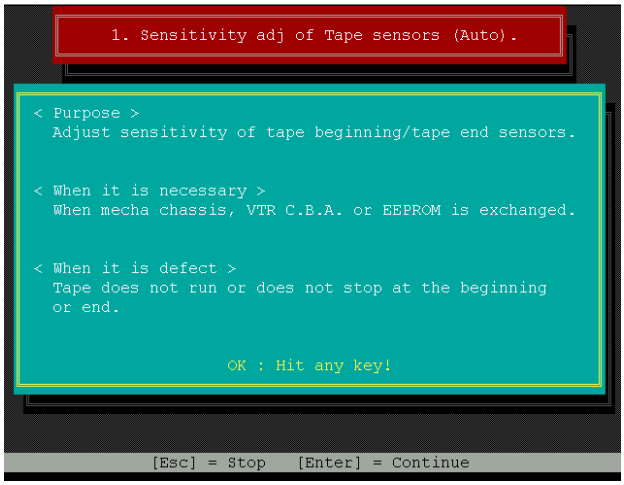
7. VTR ADJUSTMENT PROCEDURE

Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.
Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

7-1. Sensitivity adj of Tape sensors Adjustment (AUTO)

This adjustment can be adjust automatically.

1. Insert the Tape End/Beg. Sensor Cassette (VFK1217) into the Unit.
2. Open the “Video adjustment menu”.
3. Select “1.Sensitivity adj of Tape sensors (Auto)” in the Video adjustment menu, and then press the “Enter” key.

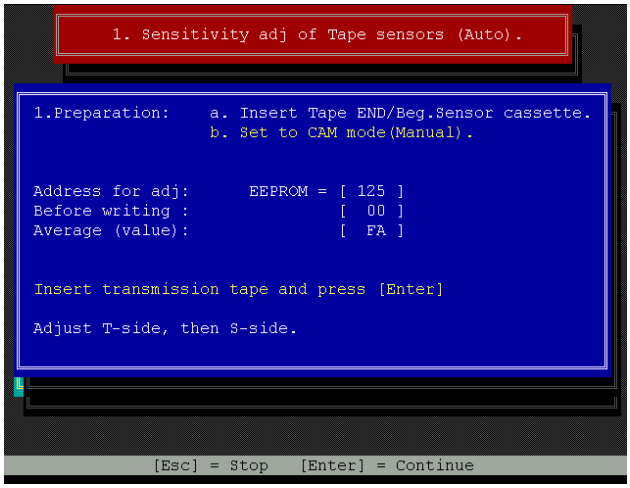

1. Sensitivity adj of Tape sensors (Auto).
< Purpose >
Adjust sensitivity of tape beginning/tape end sensors.
< When it is necessary >
When mecha chassis, VTR C.B.A. or EEPROM is exchanged.
< When it is defect >
Tape does not run or does not stop at the beginning
or end.
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

PRESS ENTER KEY.

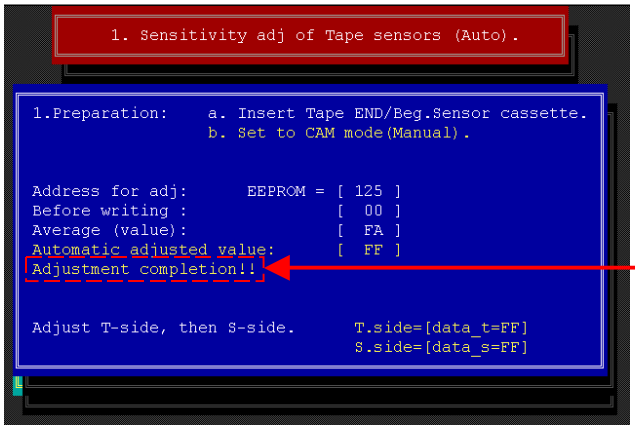
1. Sensitivity adj of Tape sensors (Auto).
< Purpose >
Adjust sensitivity of tape beginning/tape end sensors.
Open the door with the open lever in
the cassette unit because it up.
Continue : [Enter]. Interrupt : [Esc]
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

Unnecessary open the door, PRESS ENTER KEY.

4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.


1. Sensitivity adj of Tape sensors (Auto).
1.Preparation: a. Insert Tape END/Beg.Sensor cassette.
b. Set to CAM mode(Manual).
Address for adj: EEPROM = [125]
Before writing : [00]
Average (value): [FA]
Insert transmission tape and press [Enter]
Adjust T-side, then S-side.
[Esc] = Stop [Enter] = Continue

In case of the “Tape END/Beg. Sensor cassette(VFK1217) is already inserted, PRESS ENTER KEY.

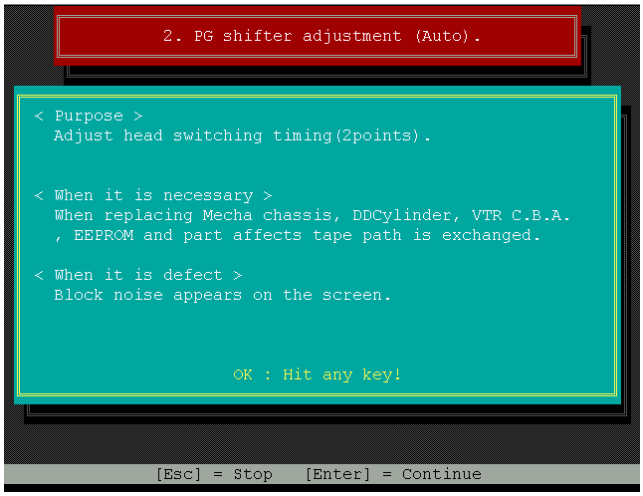

1. Sensitivity adj of Tape sensors (Auto).
1.Preparation: a. Insert Tape END/Beg.Sensor cassette.
b. Set to CAM mode(Manual).
Address for adj: EEPROM = [125]
Before writing : [00]
Average (value): [FA]
Automatic adjusted value: [FF]
Adjustment completion!!
Adjust T-side, then S-side.
T.side=[data_t=FF]
S.side=[data_s=FF]

Please confirm this message appeared on screen, then adjustment is finished.

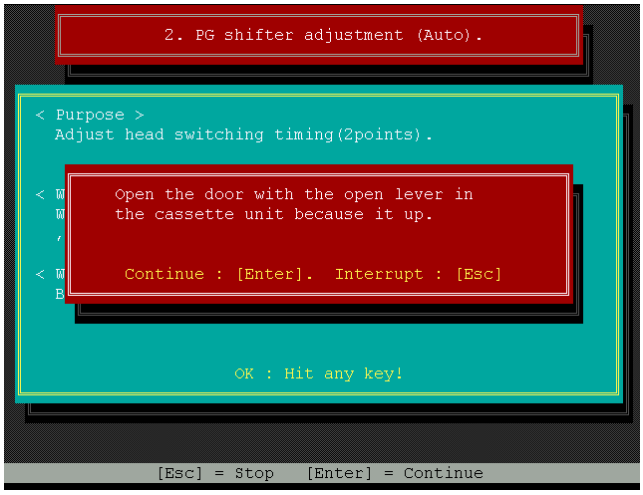
7-2. PG shifter Adjustment (AUTO)

This adjustment can be adjust automatically.

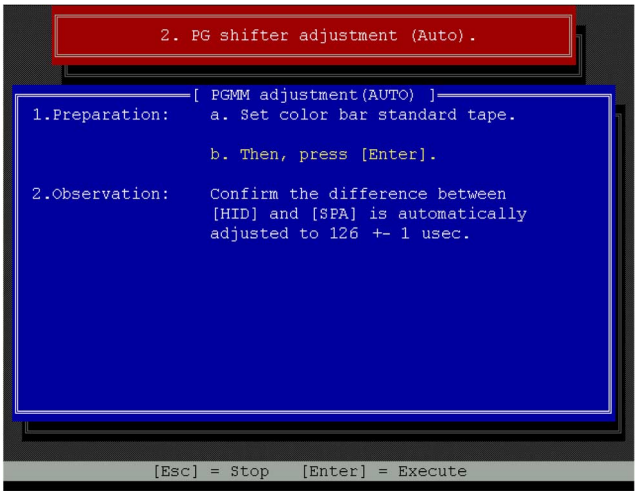
1. Connect the oscilloscope to “HID” and “SPA” on the VFK1308P.
2. Insert the DV color bar alignment tape(VFM3010EDS) into the Unit.
3. Open the “Video adjustment menu”.
4. Select “2.PG shifter adjustment (Auto)” in the Video adjustment menu, and then press the “Enter” key.
5. Set to VCR mode in AG-DVX100 follow the message ”Manually set to VCR mode.”, and then press the “Enter” key.


2. PG shifter adjustment (Auto).
< Purpose >
Adjust head switching timing(2points).
< When it is necessary >
When replacing Mecha chassis, DDCylinder, VTR C.B.A.
, EEPROM and part affects tape path is exchanged.
< When it is defect >
Block noise appears on the screen.
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

PRESS ENTER KEY.

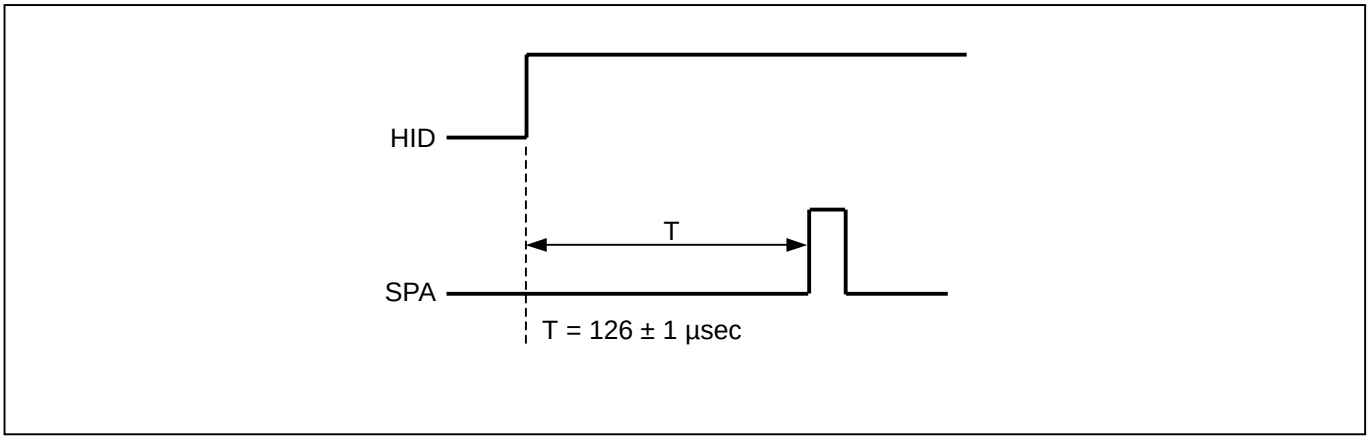

2. PG shifter adjustment (Auto).
< Purpose >
Adjust head switching timing(2points).
Open the door with the open lever in
the cassette unit because it up.
Continue : [Enter]. Interrupt : [Esc]
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

Unnecessary open the door, PRESS ENTER KEY.


2. PG shifter adjustment (Auto).
[PGMM adjustment(AUTO)]
1.Preparation: a. Set color bar standard tape.
b. Then, press [Enter].
2.Observation: Confirm the difference between [HID] and [SPA] is automatically adjusted to 126 +- 1 usec.
[Esc] = Stop [Enter] = Execute

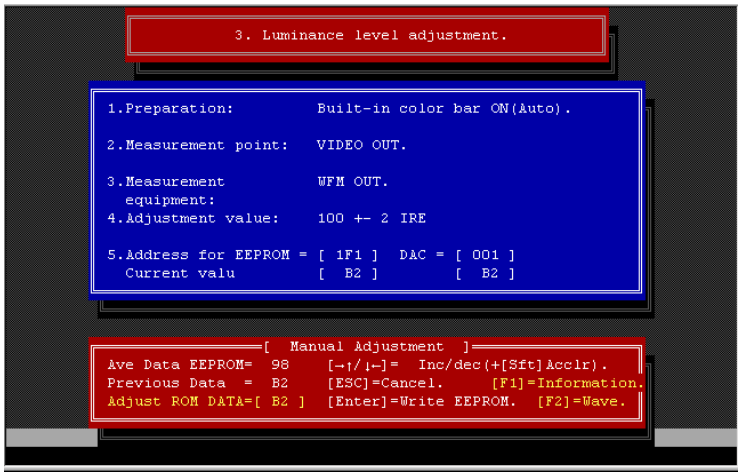
In case of the “DV color bar alignment tape (VFM3010EDS) is already inserted, PRESS ENTER KEY, then adjustment is started.

After finish adjustment, please confirm portion “T” is within the specification as shown in figure.



7-3. Luminance level Adjustment

1. Connect the WFM to VIDEO OUT.
2. Open the “Video adjustment menu”.
3. Select “3.Luminance level adjustment” in the Video adjustment menu, and then press the “Enter” key.
4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.


3. Luminance level adjustment.
1.Preparation: Built-in color bar ON(Auto).
2.Measurement point: VIDEO OUT.
3.Measurement equipment: WFM OUT.
4.Adjustment value: 100 +- 2 IRE
5.Address for EEPROM = [1F1] DAC = [001]
Current valu [B2] [B2]
[Manual Adjustment]
Ave Data EEPROM= 98 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = B2 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[B2] [Enter]=Write EEPROM. [F2]=Wave.

5. Adjust the Y level to become 100±2 IRE by press arrow keys.

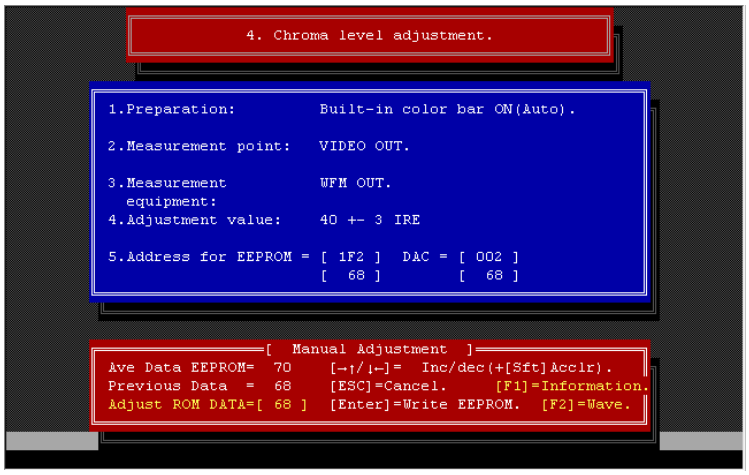
Note:

1) Y level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

7-4. Chroma level Adjustment

1. Connect the WFM to VIDEO OUT.
2. Open the “Video adjustment menu”.
3. Select “4.Chroma level adjustment” in the Video adjustment menu, and then press the “Enter” key.
4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.


4. Chroma level adjustment.
1.Preparation: Built-in color bar ON(Auto).
2.Measurement point: VIDEO OUT.
3.Measurement equipment: WFM OUT.
4.Adjustment value: 40 +- 3 IRE
5.Address for EEPROM = [1F2] DAC = [002]
[68] [68]
[Manual Adjustment]
Ave Data EEPROM= 70 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 68 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[68] [Enter]=Write EEPROM. [F2]=Wave.

5. Adjust the C level to become 40±3 IRE by press arrow keys.

Note:

1) C level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8. LCD ADJUSTMENT PROCEDURE

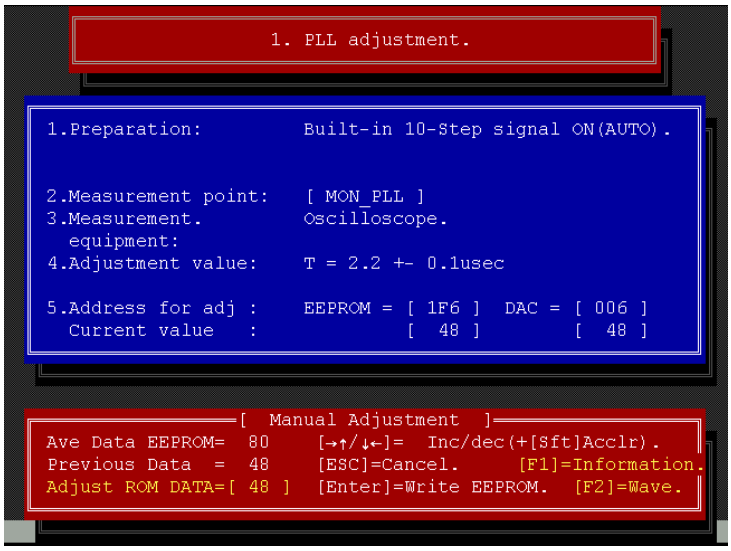
Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.

Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

Note: Set to CAMERA mode in AG-DVX100.

8-1. PLL Adjustment

1. Connect the oscilloscope to “NON_PLL” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “1.PLL adjustment” in the LCD adjustment menu, and then press the “Enter” key.


1. PLL adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_PLL]
3.Measurement. Oscilloscope.
equipment:
4.Adjustment value: T = 2.2 +- 0.1usec
5.Address for adj : EEPROM = [1F6] DAC = [006]
Current value : [48] [48]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 48 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[48] [Enter]=Write EEPROM. [F2]=Wave.

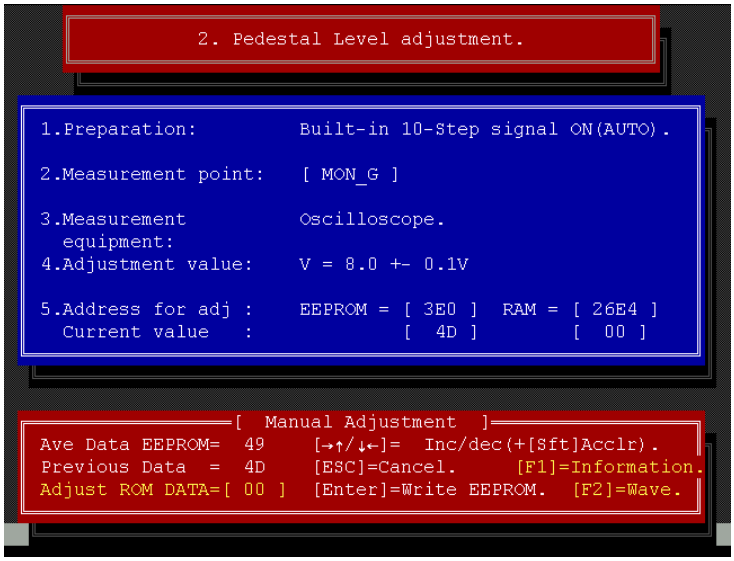
4. Adjust the width (T) to become 2.2±0.1µsec as shown in figure.

Note:

1) Width (T) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-2. Pedestal Level Adjustment

1. Connect the oscilloscope to “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “1.PLL adjustment” in the LCD adjustment menu, and then press the “Enter” key.


2. Pedestal Level adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_G]
3.Measurement Oscilloscope.
equipment:
4.Adjustment value: V = 8.0 +- 0.1V
5.Address for adj : EEPROM = [3E0] RAM = [26E4]
Current value : [4D] [00]
[Manual Adjustment]
Ave Data EEPROM= 49 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 4D [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

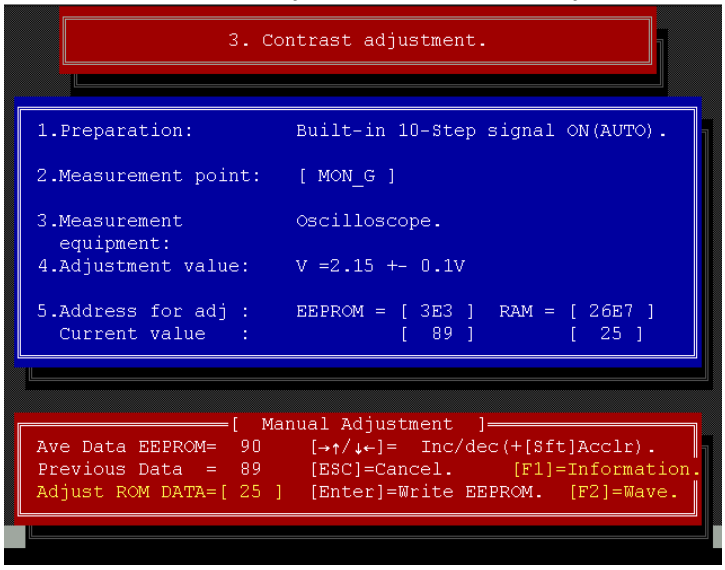
4. Adjust the differential amplitude both 0 step-level (portion “a” in figure) to become 8.0±0.1V as shown in figure.

Note:

1) Level (a) can be by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-3. Contrast Adjustment

1. Connect the oscilloscope to “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “3.Contrast adjustment” in the LCD adjustment menu, and then press the “Enter” key.


3. Contrast adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: V =2.15 +- 0.1V
5.Address for adj : EEPROM = [3E3] RAM = [26E7]
Current value : [89] [25]
[Manual Adjustment]
Ave Data EEPROM= 90 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 89 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[25] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust the differential amplitude between 0 step-level and 7 step-level (portion “V” in figure) to become 2.15±0.1V as shown in figure.

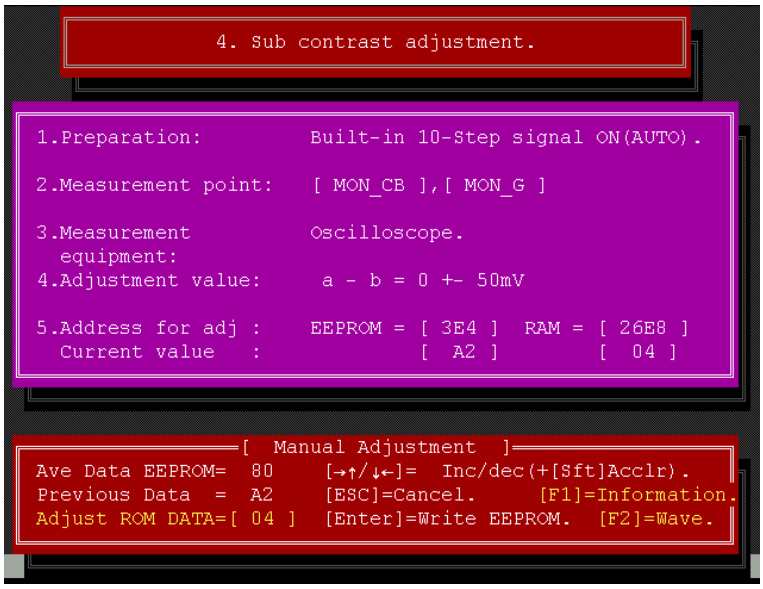
Note:

1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-4. Sub contrast Adjustment

1. Connect the oscilloscope to “MON_CB” and “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “4.Sub contrast adjustment” in the LCD adjustment menu, and then press the “Enter” key.

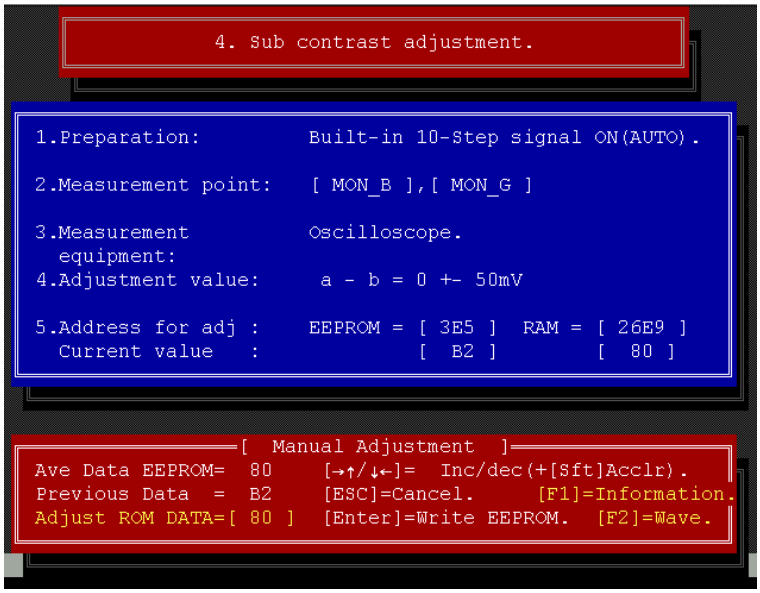

4. Sub contrast adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_CB],[MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: a - b = 0 +- 50mV
5.Address for adj : EEPROM = [3E4] RAM = [26E8]
Current value : [A2] [04]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = A2 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[04] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust level difference between “a” (MON_CB) and “b” (MON_G) to become 0±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.


4. Sub contrast adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_B],[MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: a - b = 0 +- 50mV
5.Address for adj : EEPROM = [3E5] RAM = [26E9]
Current value : [B2] [80]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = B2 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[80] [Enter]=Write EEPROM. [F2]=Wave.

6. Connect the oscilloscope to “MON_B” and “MON_G” on the VFK1308P.
7. Adjust level difference between “a” (MON_B) and “b” (MON_G) to become 0±50mV as shown in figure.

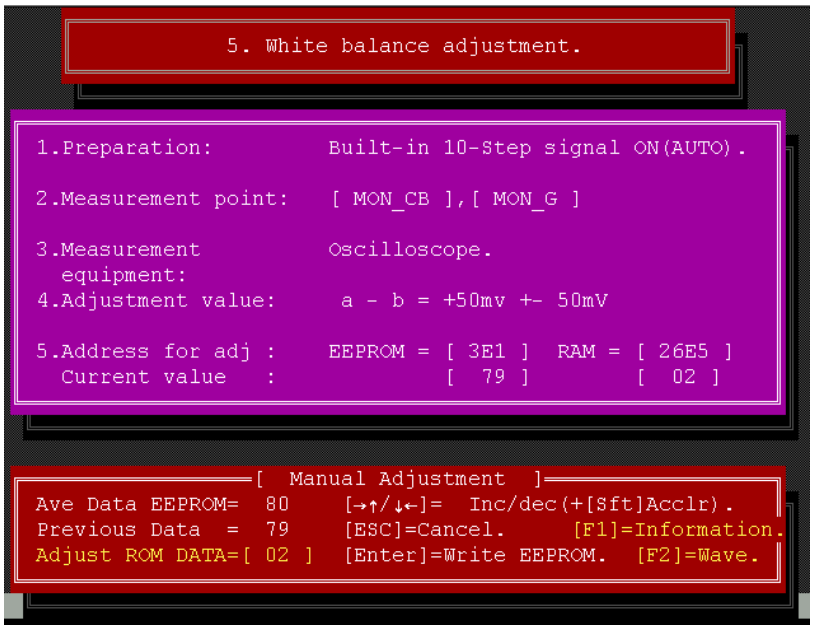
Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

8. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-5. White balance Adjustment

1. Connect the oscilloscope to “MON_CB” and “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “5.White balance adjustment” in the LCD adjustment menu, and then press the “Enter” key.

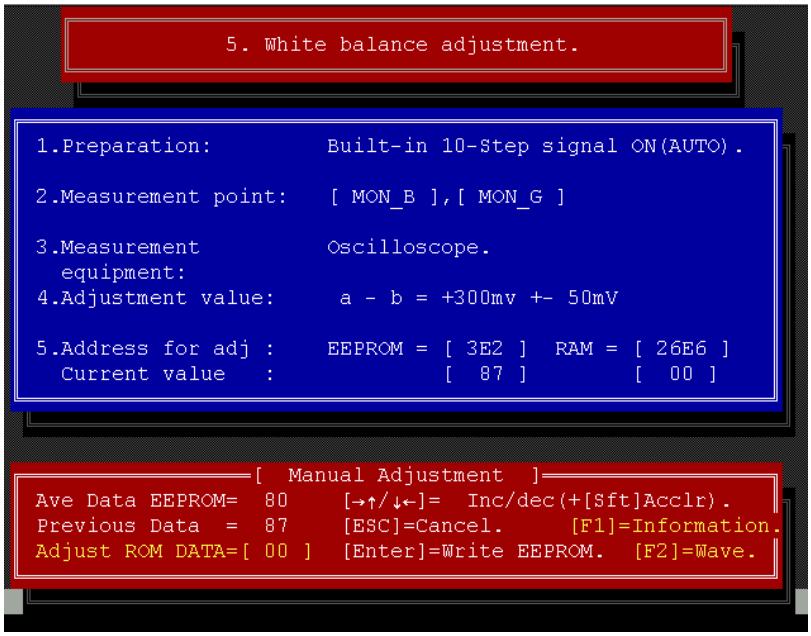

5. White balance adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_CB],[MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: a - b = +50mv +- 50mV
5.Address for adj : EEPROM = [3E1] RAM = [26E5]
Current value : [79] [02]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 79 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[02] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust level difference between “a” (MON_CB) and “b” (MON_G) to become +50mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.


5. White balance adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_B],[MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: a - b = +300mv +- 50mV
5.Address for adj : EEPROM = [3E2] RAM = [26E6]
Current value : [87] [00]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 87 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

6. Connect the oscilloscope to “MON_B” and “MON_G” on the VFK1308P.
7. Adjust level difference between “a” (MON_B) and “b” (MON_G) to become +300mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

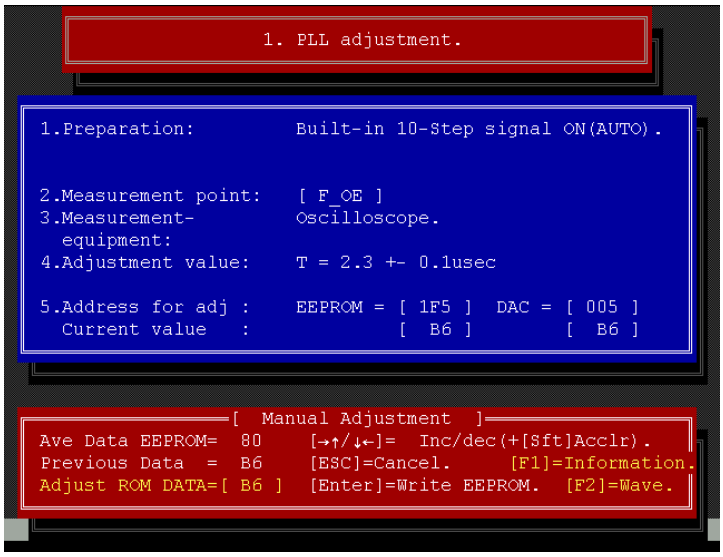
8. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9. EVF ADJUSTMENT PROCEDURE

Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.
Perform the all PC-EVR adjustments, by referring to procedures on PC screen.
Note: Set to CAMERA mode in AG-DVX100.

9-1. EVF PLL Adjustment

1. Connect the oscilloscope to “F_OE” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “1.PLL adjustment” in the EVF adjustment menu, and then press the “Enter” key.

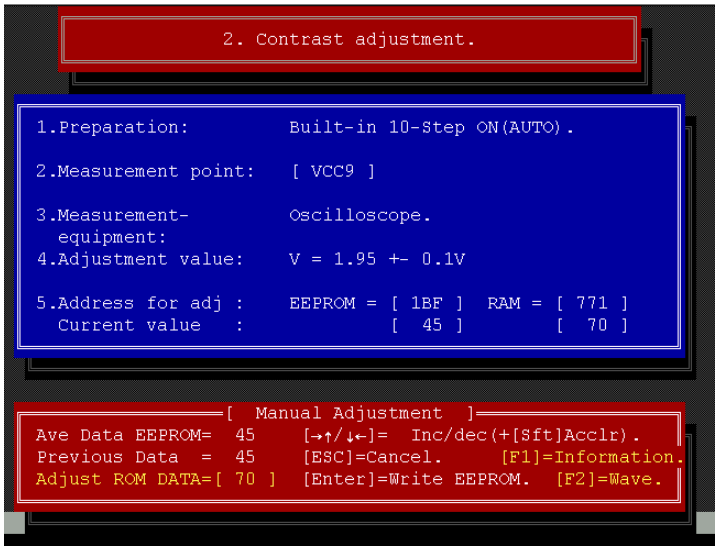

1. PLL adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [F_OE]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: T = 2.3 +- 0.1usec
5.Address for adj : EEPROM = [1F5] DAC = [005]
Current value : [B6] [B6]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = B6 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[B6] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust the width (T) to become 2.3±0.1µsec as shown in figure.

Note:
1) Width (T) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-2. EVF Contrast Adjustment

1. Connect the oscilloscope to “VCC9” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “2.Contrast adjustment” in the EVF adjustment menu, and then press the “Enter” key.

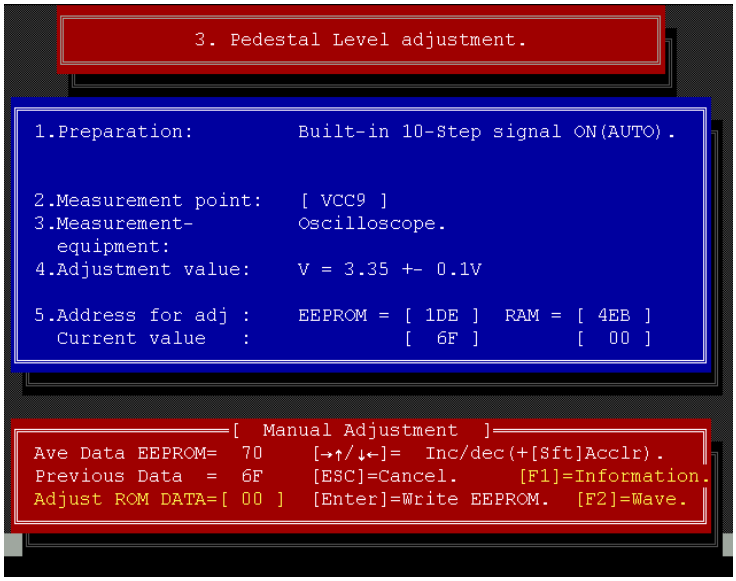

2. Contrast adjustment.
1.Preparation: Built-in 10-Step ON(AUTO).
2.Measurement point: [VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: V = 1.95 +- 0.1V
5.Address for adj : EEPROM = [1BF] RAM = [771]
Current value : [45] [70]
[Manual Adjustment]
Ave Data EEPROM= 45 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 45 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[70] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust the differential amplitude between 1 step-level and 10 step-level (portion “V” in figure) to become 1.95±0.1V as shown in figure.

Note:
1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-3. EVF Pedestal Level Adjustment

1. Connect the oscilloscope to “VCC9” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “3.Pedestal Level adjustment” in the EVF adjustment menu, and then press the “Enter” key.


3. Pedestal Level adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: V = 3.35 +- 0.1V
5.Address for adj : EEPROM = [1DE] RAM = [4EB]
Current value : [6F] [00]
[Manual Adjustment]
Ave Data EEPROM= 70 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 6F [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust the differential amplitude both 10 step-level (portion “V” in figure) to become 3.35±0.1V as shown in figure.

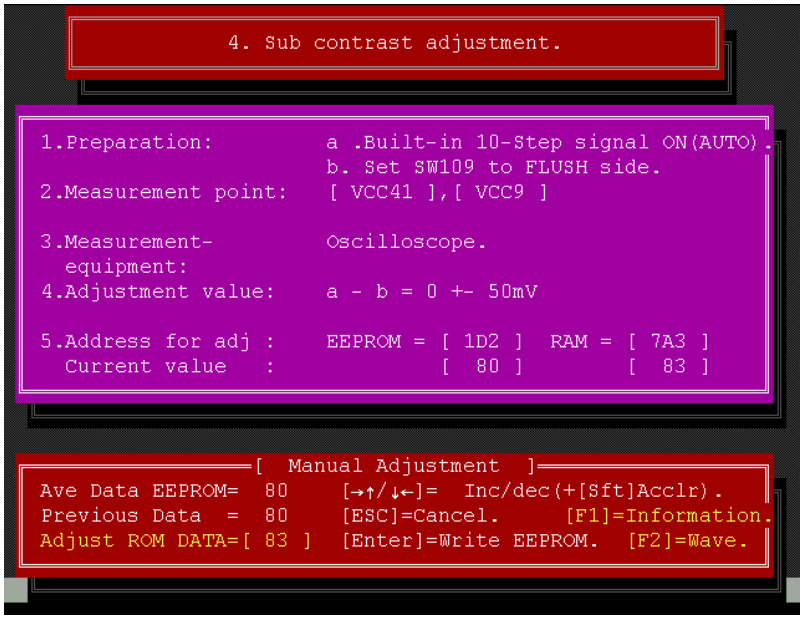
Note:

1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-4. EVF Sub contrast Adjustment

1. Set SW109 to “FLUSH” side on the VFK1308P.
2. Connect the oscilloscope to “VCC41” and “VCC9” on the VFK1308P.
3. Open the “EVF adjustment menu”.
4. Select “4.Sub contrast adjustment” in the EVF adjustment menu, and then press the “Enter” key.

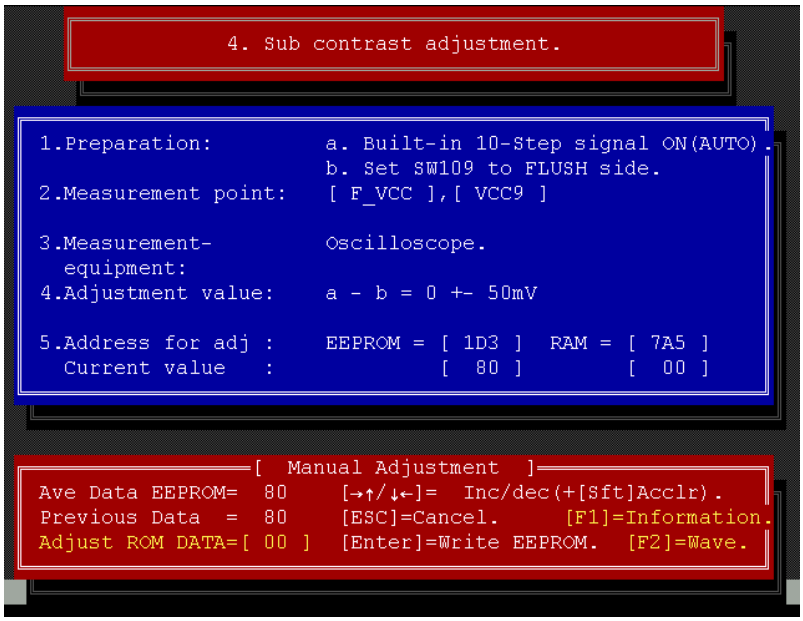

4. Sub contrast adjustment.
1.Preparation: a .Built-in 10-Step signal ON(AUTO).
b. Set SW109 to FLUSH side.
2.Measurement point: [VCC41],[VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: a - b = 0 +- 50mV
5.Address for adj : EEPROM = [1D2] RAM = [7A3]
Current value : [80] [83]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 80 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[83] [Enter]=Write EEPROM. [F2]=Wave.

5. Adjust level difference between “a” (VCC41) and “b” (VCC9) to become 0±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.


4. Sub contrast adjustment.
1.Preparation: a. Built-in 10-Step signal ON(AUTO).
b. Set SW109 to FLUSH side.
2.Measurement point: [F_VCC],[VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: a - b = 0 +- 50mV
5.Address for adj : EEPROM = [1D3] RAM = [7A5]
Current value : [80] [00]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 80 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

7. Connect the oscilloscope to “F_VCC” and “VCC9” on the VFK1308P.
8. Adjust level difference between “a” (F_VCC) and “b” (VCC9) to become 0±50mV as shown in figure.

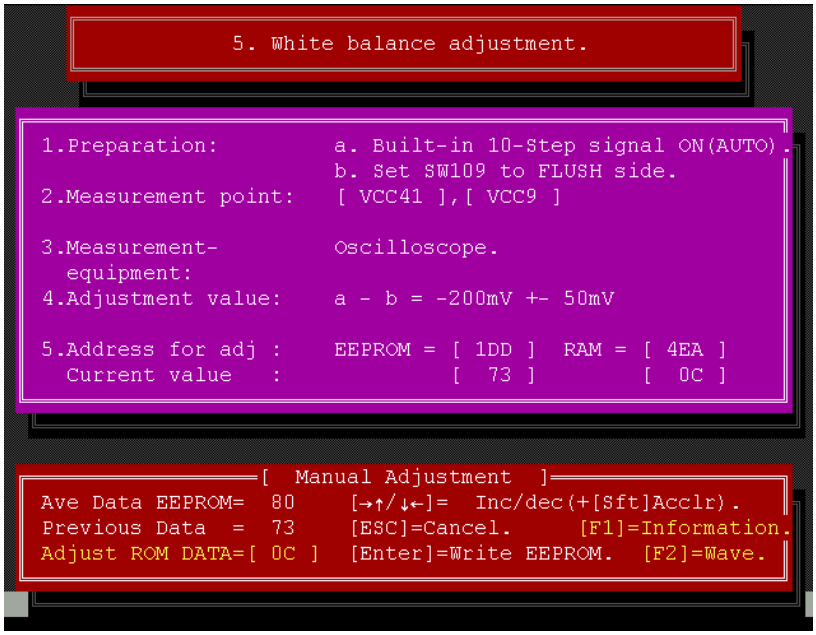
Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

9. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-5. EVF White balance Adjustment

1. Set SW109 to “FLUSH” side on the VFK1308P.
2. Connect the oscilloscope to “VCC41” and “VCC9” on the VFK1308P.
3. Open the “EVF adjustment menu”.
4. Select “5.White balance adjustment” in the EVF adjustment menu, and then press the “Enter” key.

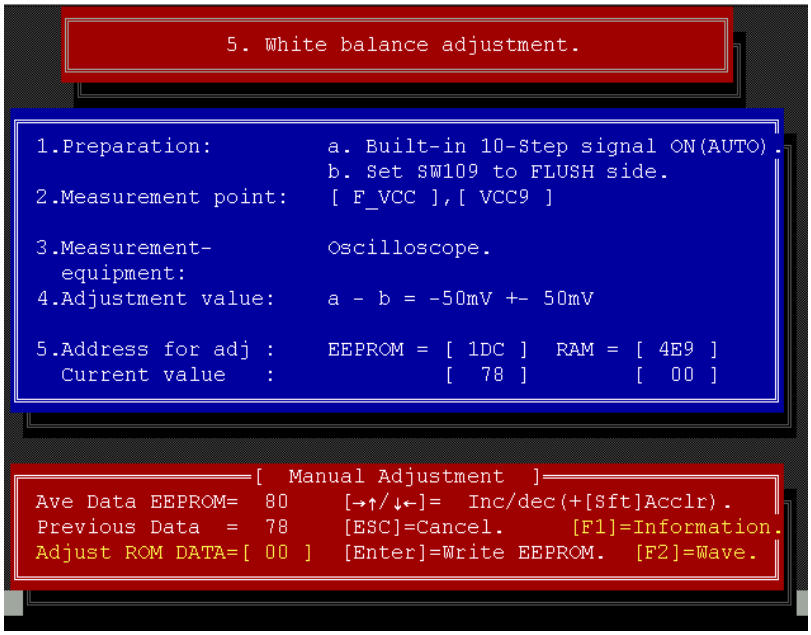

5. White balance adjustment.
1.Preparation: a. Built-in 10-Step signal ON(AUTO).
b. Set SW109 to FLUSH side.
2.Measurement point: [VCC41],[VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: a - b = -200mV +- 50mV
5.Address for adj : EEPROM = [1DD] RAM = [4EA]
Current value : [73] [0C]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 73 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[0C] [Enter]=Write EEPROM. [F2]=Wave.

5. Adjust level difference between “a” (VCC41) and “b” (VCC9) to become -200mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.

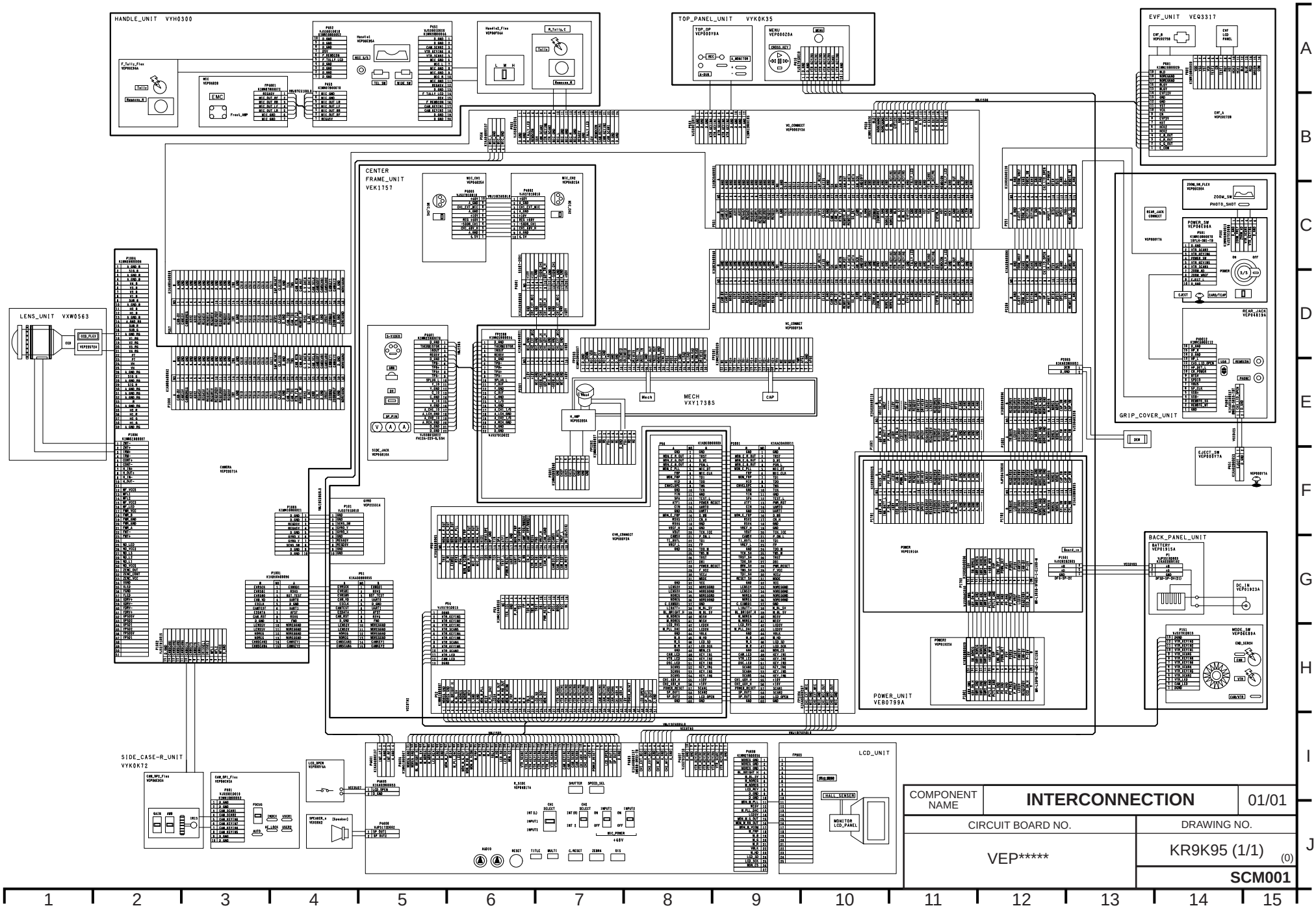

5. White balance adjustment.
1.Preparation: a. Built-in 10-Step signal ON(AUTO).
b. Set SW109 to FLUSH side.
2.Measurement point: [F_VCC],[VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: a - b = -50mV +- 50mV
5.Address for adj : EEPROM = [1DC] RAM = [4E9]
Current value : [78] [00]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 78 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

7. Connect the oscilloscope to “F_VCC” and “VCC9” on the VFK1308P.
8. Adjust level difference between “a” (F_VCC) and “b” (VCC9) to become –50mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

9. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.


HANDLE_UNIT VYH0300
TOP_PANEL_UNIT VYK0K35
EVF_UNIT VEQ3317
CENTER FRAME_UNIT VEK1757
LENS_UNIT VXW0563
MECH VXY1738S
GRIP_COVER_UNIT
BACK_PANEL_UNIT
POWER_UNIT VEB0799A
SIDE_CASE-R_UNIT VYK0K72
LCD_UNIT
COMPONENT NAME
INTERCONNECTION
01/01
CIRCUIT BOARD NO.
VEP*****
DRAWING NO.
KR9K95 (1/1) (0)
SCM001

1. SERVICING FIXTURES AND TOOLS

The following servicing tools are required for mechanical and electrical servicing and alignment.
The items marked **"NEW"** in the following list are necessary for the AG-DVX100.
Please refer to **"Y"** in table below, these tools were also used for servicing the AG-DVC15.

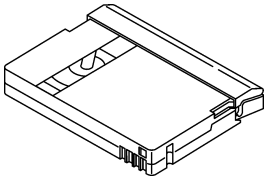
1-1. Summary Table of Servicing Fixtures and Tools

No.	Parts No.	NAME	AG-DVC15	PURPOSE	REMARK
1	VFM3010EDS	DV Alignment Tape (Color bar)	Y	Electrical Adjustment	
2	VFM3000EDS	DV Alignment Tape (Linearity)	Y	Tape Interchangeability Adjustment	
3	VFK1217	Tape End/Beg Detect Cassette	Y	Sensor Sensitivity Adjustment	
4	VFK1811	EVR Adjustment Software	N	PC Electrical Adjustment System	**NEW**
5	VFK1308P	Measuring Board	Y	Test point Board and PC I/F	
6	VFK1309A	EVR Connector Board	N	Connection for PC Adjustment	**NEW (NOTE)**
7	VFK1694	EVR Extender board	Y	Connection for PC Adjustment	
8	VJA0941	DC Cable	Y	Power Supply for Measuring Board	
9	VFK1317	30pin Flat Cable	Y	Between Meas. & Con. Boards	
10	VFK1809	72mm Attachment Ring	N	Camera Adjustment	**NEW**
11	VFK1164TAR43	43mm Attachment Ring	Y	Camera Adjustment	
12	VFK1164TCM01	Collimator Set (Infinity Lens)	Y	Camera Adjustment	
13	VFK1341	CC Filter (LB40)	Y	Camera Adjustment	
14	VFK1347	CC Filter (LB120)	Y	Camera Adjustment	
15	VFK1345	CC Filter Holder	Y	Camera Adjustment	
16	VFK1346	Step Down Ring	Y	Camera Adjustment	
17	VFK1659	Step-Up Ring(43mm-49mm)	Y	Camera Adjustment	
18	VFK1660	Step-Up Ring(49mm-62mm)	Y	Camera Adjustment	
19	VFK1481E	LISTA Software	Y	LISTA Adjustment	
20	VFK1409A	Measuring Board	N	LISTA Adjustment	**NEW (NOTE)**
21	VFK1233	Mech. Neutral Plate	Y	Mechanical Maintenance	
22	VFK1266	Gear Driver	Y	Mechanical Maintenance	
23	VFK1149	Post Driver	Y	Tape Post Height Adjustment	
24	VFK1151	Nut Driver(2.5mm)	Y	Tape Post Height Adjustment	
25	VFK1810	LISTA Measuring Board	N	LISTA Adjustment	**NEW**
26	VFK1186	LISTA Cable	Y	LISTA Adjustment	

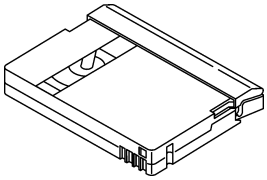
NOTE:

1. If you already have VFK1309, if can be modified to VFK1309A.
   Please refer to explanation on section 4.
2. If you already have VFK1409S, if can be use to LISTA adjustment with VFK1810 instead of VFK1409A.
   How to install the VFK1810 to VFK1409S, please refer to explanation in section 3.

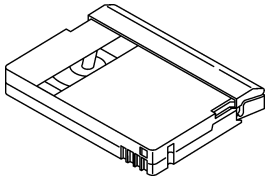
1 **VFM3010EDS**
DV Alignment Tape
(Color bar)



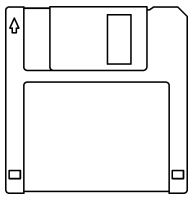
2 **VFM3000EDS**
DV Alignment Tape
(Linearity)



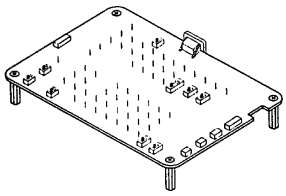
3 **VFK1217**
Tape End／Beg. Detect
Cassette



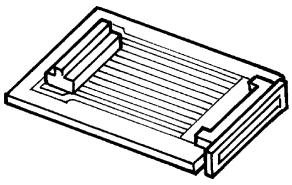
4 **VFK1811**
EVR Adjustment Software



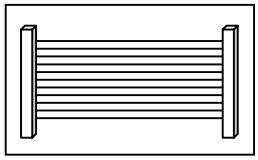
5 **VFK1308P**
Measuring Board



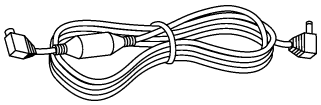
6 **VFK1309A**
EVR Connector Board



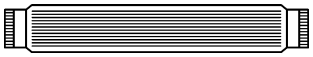
7 **VFK1694**
EVR Extender Board



8 **VJA0941**
DC Cable

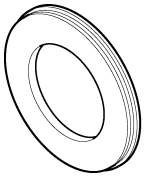


9 **VFK1317**
30pin Flat Cable

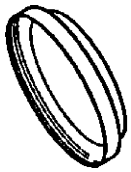


(Measuring Board is required 2pcs. of this cable)

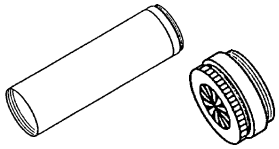
10 **VFK1809**
72mm Attachment Ring



11 **VFK1164TAR43**
43 mm Attachment Ring



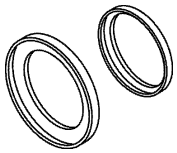
12 **VFK1164TCM01**
Collimator Set
(Infinity Lens)



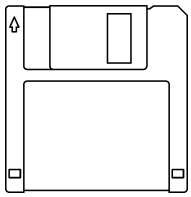
13 **VFK1341** (LB40)
14 **VFK1347** (LB120)
CC Filter

15 **VFK1345**
CC Filter Holder
16 **VFK1346**
Step Down Ring

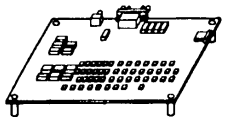
17 **VFK1659**
Step-up Ring (43mm 49mm)
18 **VFK1660**
Step-up Ring (49mm 62mm)



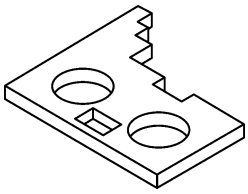
19 **VFK1481E**
LISTA Software



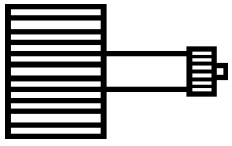
20 **VFK1409A**
Measuring Board



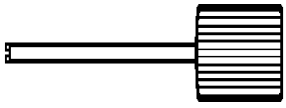
21 **VFK1233**
Mech. Neutral Plate



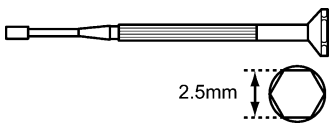
22 **VFK1266**
Gear Driver



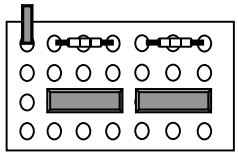
23 **VFK1149**
Post Driver



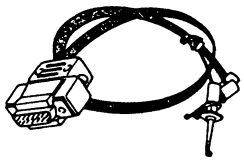
24 **VFK1151**
Nut Driver (2.5mm)



25 **VFK1810**
LISTA Measuring Board



26 **VFK1186**
LISTA Cable



2. MAINTENANCE

Maintenance is done by periodically performing suitable maintenance servicing in order to maintain the functions always in the best condition, so that the user can use the equipment safely. Video equipment with mounted mechanisms uses wear parts, and their wear and deterioration causes troubles. Dust and dirt also can impair stable operation. For this reason it is important not to just perform repair at the time of trouble, but also to perform suitable maintenance at regular intervals.

2-1. Maintenance Chart

The following periodic maintenance is required to maintain AG-DVX100 in good condition

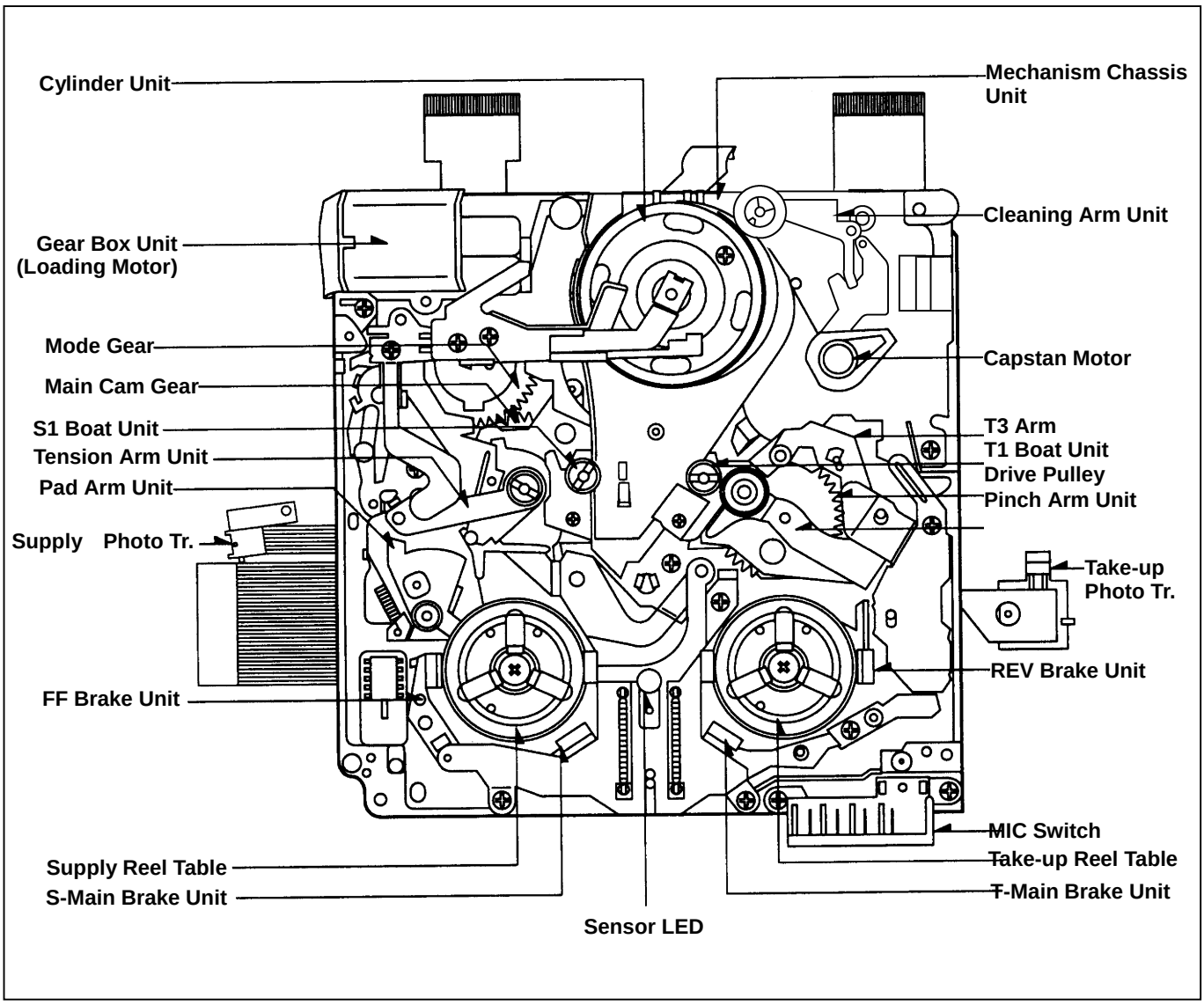
No.	Part Name	Part No.	Cleaning	Replacement	Remark
	Tape Transport Part	------	100 hours	------	*1
1	Cylinder Unit	VEG1573	100 hours	Every 1000 hours	
2	Pinch Arm Unit	VXL3161	------	Every 1000 hours	
3	Cleaning Arm Unit	VXL3103	------	Every 1000 hours	
4	Gear Box	VXA5417	------	Every 1000 hours	
5	REV Brake Unit	VXZ0323	------	Every 1000 hours	
6	FF Brake Unit	VXZ0322	------	Every 1000 hours	
7	S-Main Brake Unit	VXZ0321	------	Every 1000 hours	
8	T-Main Brake Unit	VXZ0319	------	Every 1000 hours	
9	Supply Reel Table	VXR0355	------	Every 1000 hours	
10	Take-up Reel Table	VXR0356	------	Every 1000 hours	
11	Made Cam SW Unit	VSR0114	------	Every 1000 hours	
12	Main Cam Gear	VXA5407	------	Every 1000 hours	
13	S1 Boat Unit	VXA5409	------	Every 1000 hours	
14	T1 Boat Unit	VXA5410	------	Every 1000 hours	
15	Tension Arm Unit	VXL2456	------	Every 1000 hours	
16	Pad Arm Unit	VXL2732	------	Every 1000 hours	
17	Mechanism Chassis Unit	VXY1738S	------	Every 3000 hours	*2

Note:
Using hours are based on the head rotation hours. (HOUR METER can be confirm on item HOUR METER in OTHER FUNCTION menu.)
Using hours are recommendation. It may depend on temperature, humidity, quality of tape or dust condition.
Using hours are listed as the reference of maintenance. They do not mean guarantee hours.

*1 Tape transport parts mean following parts.
(Tension Post, S3 Post, S2 Post, S1Roller, Cylinder & Heads,T1 Roller, T2 Post, Capstan Shaft, Pinch Roller and T3 Post)

*2 Parts listed from No.1 to 16 are included in Mechanical Chassis Unit. Replacing the Mechanism Chassis Unit is recommended every 3000 hours.

2-2. Mechanical Parts Location



3. MANUAL TAPE EJECT (EMERGENCY EJECT)

When the tape cannot be ejected by normal operation because of trouble in the electrical system or mechanical system, the tape can be removed from the unit manually by using the following method.

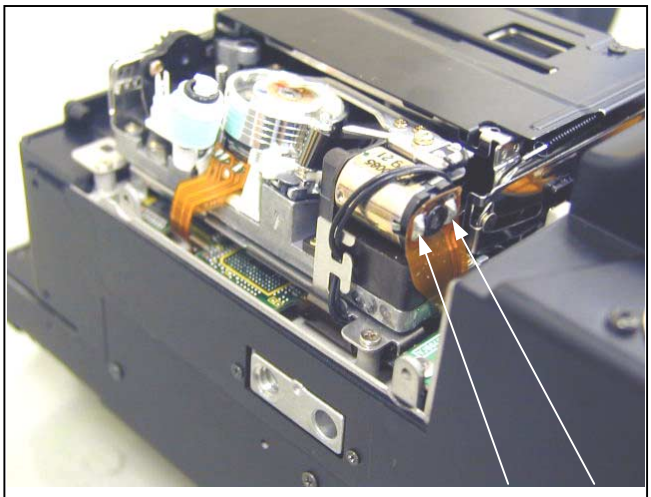
1. Remove the Grip Cover Unit.
2. Supply 4.5 Volts using 3 AA batteries in series to unload the posts using the motor.
3. Stop supplying the power at unloading complete position.

NOTE: If supply the power continuously, the Cassette Up Unit be eject.

4. It has lifted a tape with the finger from the front as shown in the figure and it makes space, it confirms the position of a supply reel. It inserts stick as shown in the figure, it turns a supply reel to counterclockwise from the front and it rolls up a tape.

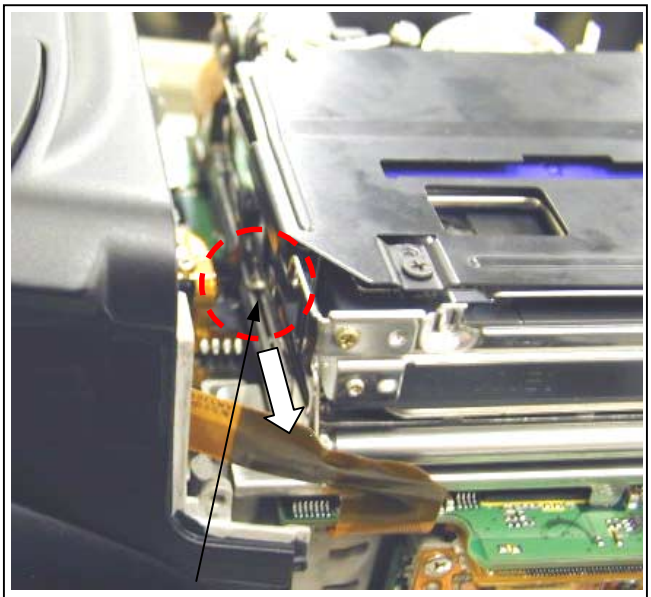
NOTE: Please use the one which doesn't damage the Supply Reel with the non-magnetism type.

5. Push the lock lever to arrow direction as shown in figure 3 to eject the Cassette Up Unit and remove the tape.



UNLOADING.....A: +4.5V B: GND
LOADING .....A: GND B: +4.5V

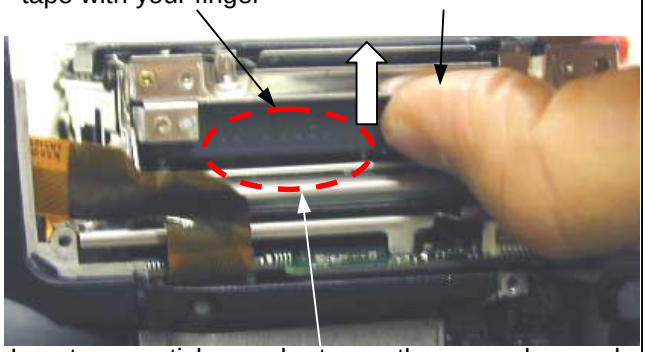
Figure 1



Change to LOCK LEVER

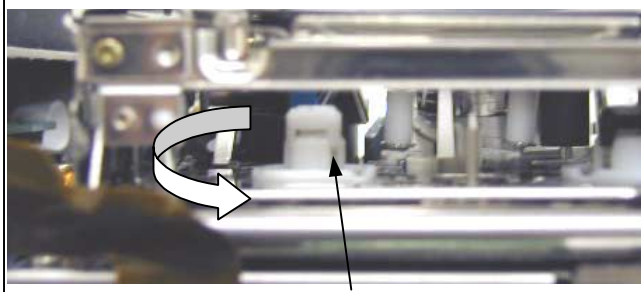
Figure 3

Confirm the position of the supply reel and lift the tape with your finger



Insert a stick and turn the supply reel counterclockwise from the front and roll the tape back into the cassette.

It has a condition with no tape.



The supply reel base

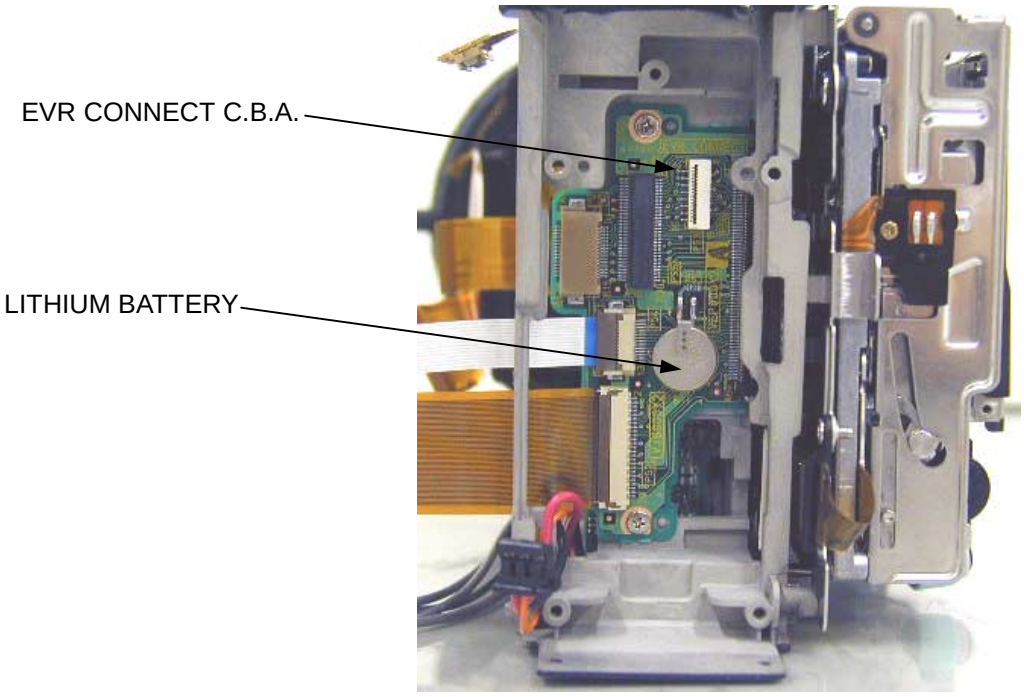
Turn the supply reel counterclockwise and this will take up the slack in the tape.

Figure 2

4. LITHIUM BATTERY

4-1. Replacement Procedure

1. Remove the EVR CONNECT C.B.A. (Refer to Disassembly Procedures).
2. Unsolder the Lithium battery “Ref No: B51/Part No: VSB0407” and then replace with the new one.



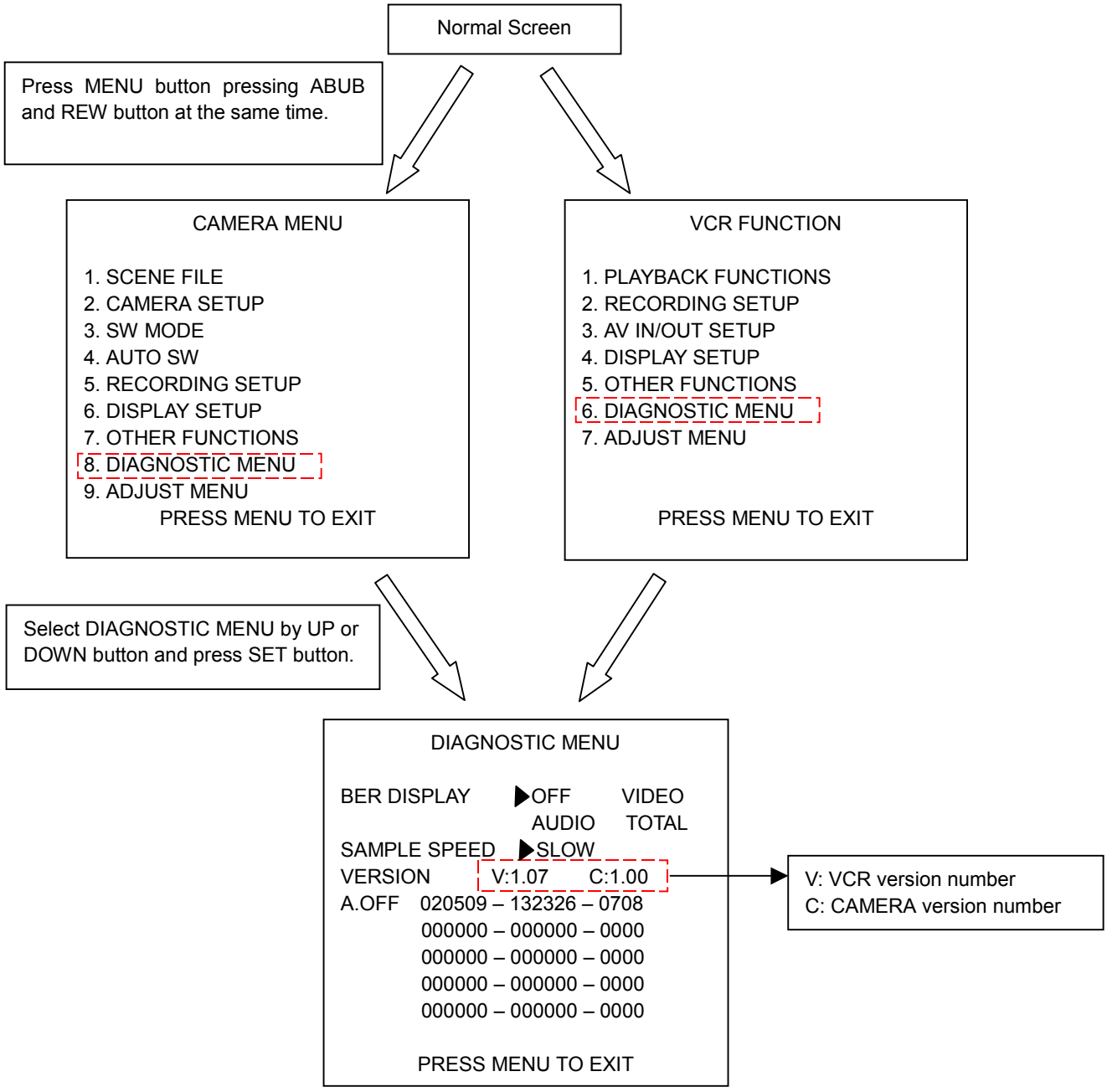
NOTE:
The lithium battery is a critical component.
It must never be subjected to excessive heat of discharge.
It must therefore only be fitted in equipment designed specifically for its use.
Replacement batteries must be of the same type and manufacture.
They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.
Do not attempt to re-charge the old battery or re-use it for any other purpose.
It should be disposed of in waste products destined for burial rather than incineration.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the equipment manufacturer.
Discard used batteries according to manufacture’s instructions.

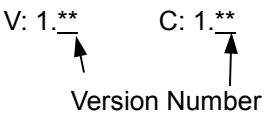
5. DIAG MENU

The DIAGNOSTIC menu is the menu to confirm the condition of the VCR and it is possible to do the confirmation of the error rate, software version and auto off log.
When pressing the MENU button while pressing the ADUB button and the REW button at the same time, DIAGNOSTIC menu can be displayed.
Next, the DIAGNOSTIC menu is open when selecting DIAGNOSTIC MENU in UP(▲:PLAY) or DOWN (▼:STOP) button and pressing the SET(STILL) button.
NOTE: Also ADJUST menu is displayed is VCR mode.



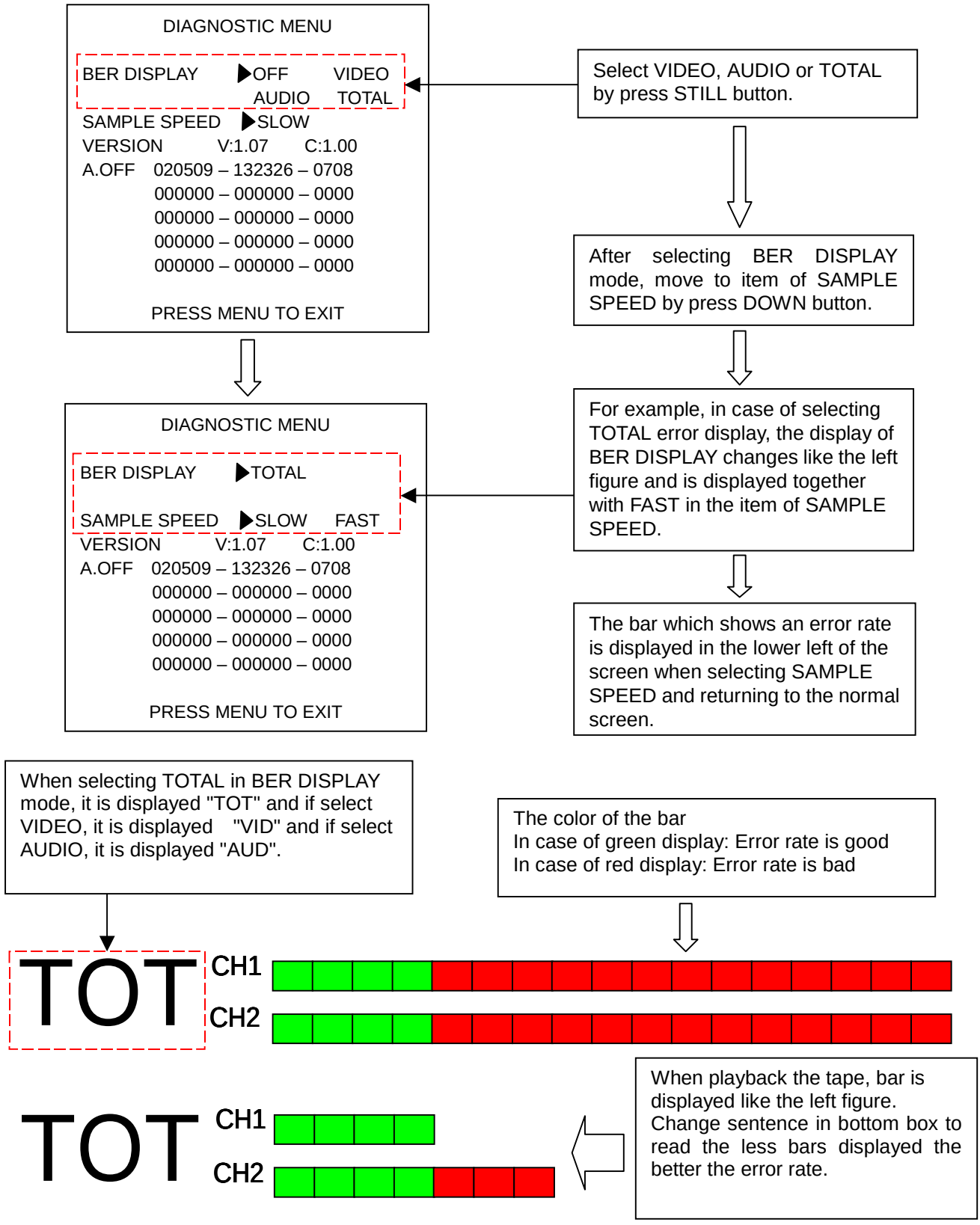
5-1. Software Version Display

Software version of VCR and CAMERA microprocessor is displayed



5-2. How to display the Error Rate.

The AG-DVX100 can be displayed Error Rate and it shows the playing condition of the VCR.
In case of the error rate is displayed, BER DISPLAY and SAMPLE SPEED mode is select on DIAGNOSTIC menu.


DIAGNOSTIC MENU
BER DISPLAY ▶OFF VIDEO
AUDIO TOTAL
SAMPLE SPEED ▶SLOW
VERSION V:1.07 C:1.00
A.OFF 020509 – 132326 – 0708
000000 – 000000 – 0000
000000 – 000000 – 0000
000000 – 000000 – 0000
000000 – 000000 – 0000
PRESS MENU TO EXIT
Select VIDEO, AUDIO or TOTAL by press STILL button.
After selecting BER DISPLAY mode, move to item of SAMPLE SPEED by press DOWN button.
For example, in case of selecting TOTAL error display, the display of BER DISPLAY changes like the left figure and is displayed together with FAST in the item of SAMPLE SPEED.
DIAGNOSTIC MENU
BER DISPLAY ▶TOTAL
SAMPLE SPEED ▶SLOW FAST
VERSION V:1.07 C:1.00
A.OFF 020509 – 132326 – 0708
000000 – 000000 – 0000
000000 – 000000 – 0000
000000 – 000000 – 0000
000000 – 000000 – 0000
PRESS MENU TO EXIT
The bar which shows an error rate is displayed in the lower left of the screen when selecting SAMPLE SPEED and returning to the normal screen.
When selecting TOTAL in BER DISPLAY mode, it is displayed "TOT" and if select VIDEO, it is displayed "VID" and if select AUDIO, it is displayed "AUD".
The color of the bar
In case of green display: Error rate is good
In case of red display: Error rate is bad
TOT
CH1
CH2
TOT
CH1
CH2
When playback the tape, bar is displayed like the left figure. Change sentence in bottom box to read the less bars displayed the better the error rate.

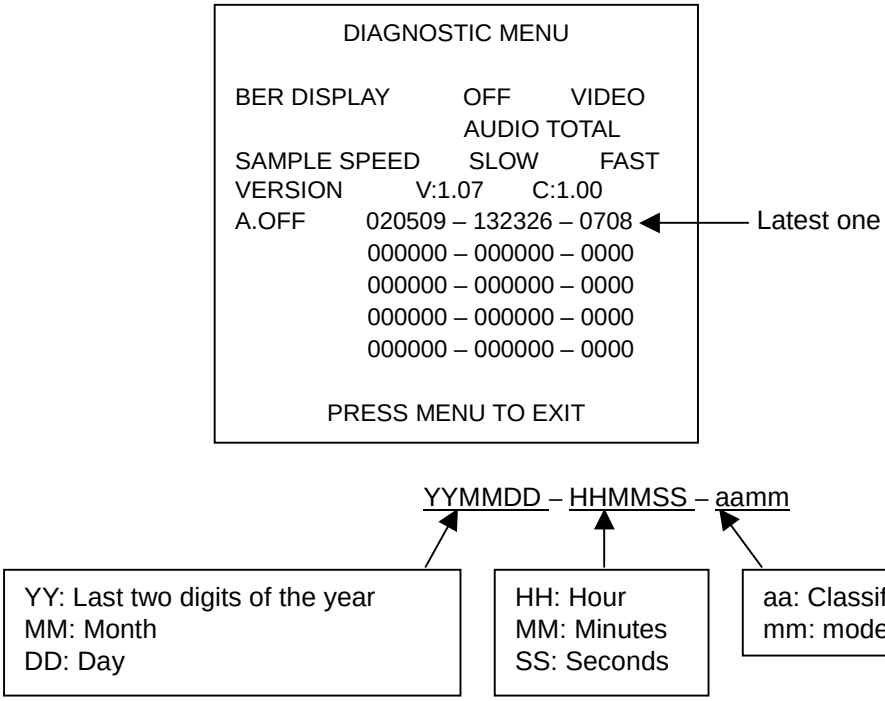
How to confirm the Error rate.

1. Select the TOTAL in item of BER DISPLAY.
2. Record the color bar signal on LP mode and playback the recorded portion. Confirm that the number of bar on display within 10 pieces.

5-3. Auto Off Log

The VCR can be displayed warning and auto off as alarm display. In case of the auto off occurred, the number and message are displayed in the normal screen. Contents of auto off can be confirm until previous 5 problem in diagnostic menu.

When auto off occurred, VCR is memorized date, time, classified of auto off and mode follow as below indicated format. Diagnostic menu can be displayed until previous 5 problem.

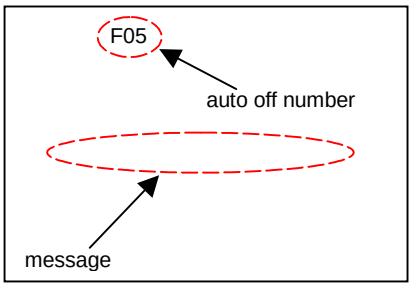


For example, in case of displayed “020209–132326–0708”, Cylinder Lock occurred in normal playback mode at 13:23:26 on Feb. 9th in 2002.
Please refer to below indicated tables with classification of auto off and mode.

< aa: Classified of AUTO OFF >

aa	Super display	Contents
01	F51	FOCUS MOTOR LOCK
03	F53	PSD NG
04	F54	GYRO NG
07	F05	CYLINDER LOCK
08	F04	LOADING LOCK
09	F03	UNLOADING LOCK
0A	F01	T REEL LOCK
0B	F02	S REEL LOCK

(super position of number and message)



< mm : MODE >

mm	Contents	mm	Contents
01	EJECT	12	AUDIO DUB RECORDING
02	STOP 1	13	CAMERA RECORDING STANDBY
03	STOP 2	14	CAMERA RECORDING
04	FAST FORWARD	15	CAMERA SEARCH (FORWARD)
05	REWIND	16	CAMERA SEARCH (REVERSE)
06	RECORDING STANDBY	17	REC REVIEW
07	MORMAL RECORDING	18	CAMERA EJECT
08	NORMAL PLAYBACK	19	CAMERA STOP
09	REVERSE PLAYBACK	1D	CYLINDER OFF
0A	CUE (FAST PLAYBACK)	22	SEARCH (FORWARD)
0B	REVIEW (FAST PLAYBACK)	23	SEARCH (REVERSE)
0C	SLOW PLAYBACK	24	BLANK SEARCH
0D	REVERSE SLOW PLAYBACK	25	FRAME ADVANCE PLAYBACK
11	AUDIO DUB STANDBY	26	REVERSE FRAME ADVANCE PLAYBACK

5-4. Adjust Menu

Item	Set value / Display	contents
ATF GAIN		· To confirm the ATF sensitivity, change the tape speed. · By pressing SET button, enter the adjustment mode and then exit the menu once. It can be operated VTR operation that the menu mode is exited temporary. In this time, the screen is displayed as follow. NOW SERVO ADJUST PUSH MENU TO RETURN It will be returned to ADJUST MENU when the MENU key is pressed in this condition.
LINEARITY		· To confirm the LINEARITY, change the ATF sensitivity. · By pressing SET button, enter the adjustment mode and then exit the menu once. It can be operated VTR operation that the menu mode is exited temporary. In this time, the screen is displayed as follow. NOW SERVO ADJUST PUSH MENU TO RETURN It will be returned to ADJUST MENU when the MENU key is pressed in this condition.
Y LEVEL		It is adjusted the output of Y level.
C LEVEL		It is adjusted the output of C level.
DEFECT COMP	0 1 2 3	DEFECT COMP 0 1 2 3 Median filter ON ON OFF OFF Address defect compensation ON OFF ON OFF
CAM DBG INF	<u>OFF</u> ON	It can be selected ON/OFF that the screen of camera debag information. Not displayed Displayed
EEPROM VERSION		It is displayed the version of EEPROM on the VTR C.B.A..

6. CAMERA REMOTE

The control equipment is connected to CAMERA REMOTE jack to enable zooming and record start/stop to be initiated by remote control.

NOTE: CAMERA remote control is only effective CAMERA mode.

Please refer to below indicated specification, in case of external remote performed.

Equivalent circuit of CAM REMOTE jack

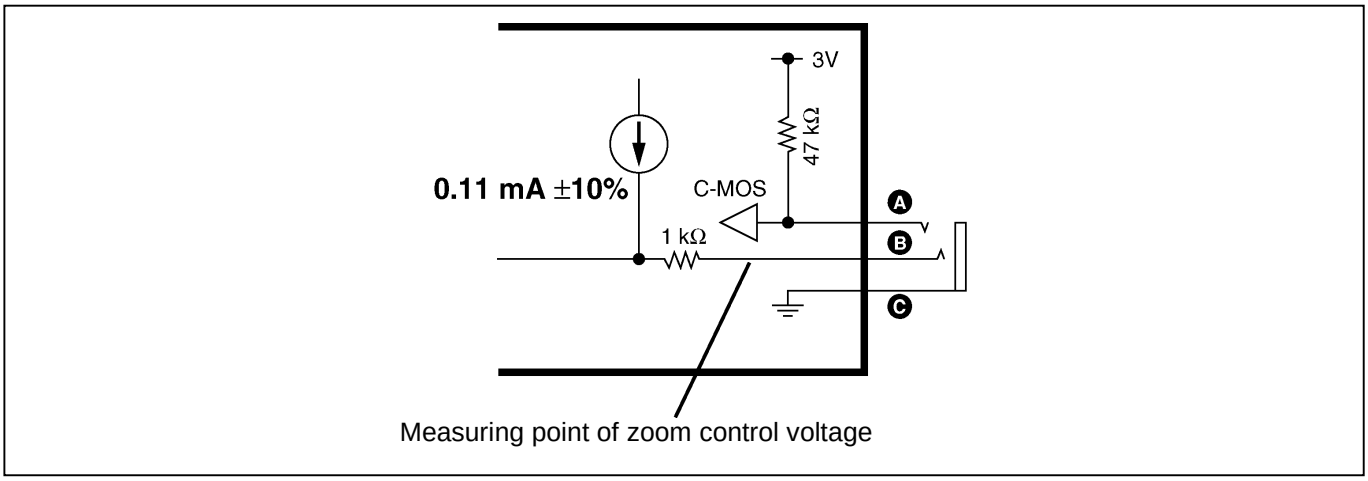


Figure A

Terminal (refer to figure A)	Contents
A	Record start/stop input
B	Zooming control input
C	GND

6-1. Record start / stop input

Every time it connects A terminal with the GND, it repeats recording and a recording stop.

6-2. Zooming control input

With the voltage to input to the B terminal, the zoom speed changes. As for the relation between the zoom control voltage and the zoom speed, it is as shown in the following.

Relation between the zoom control voltage and zoom speed

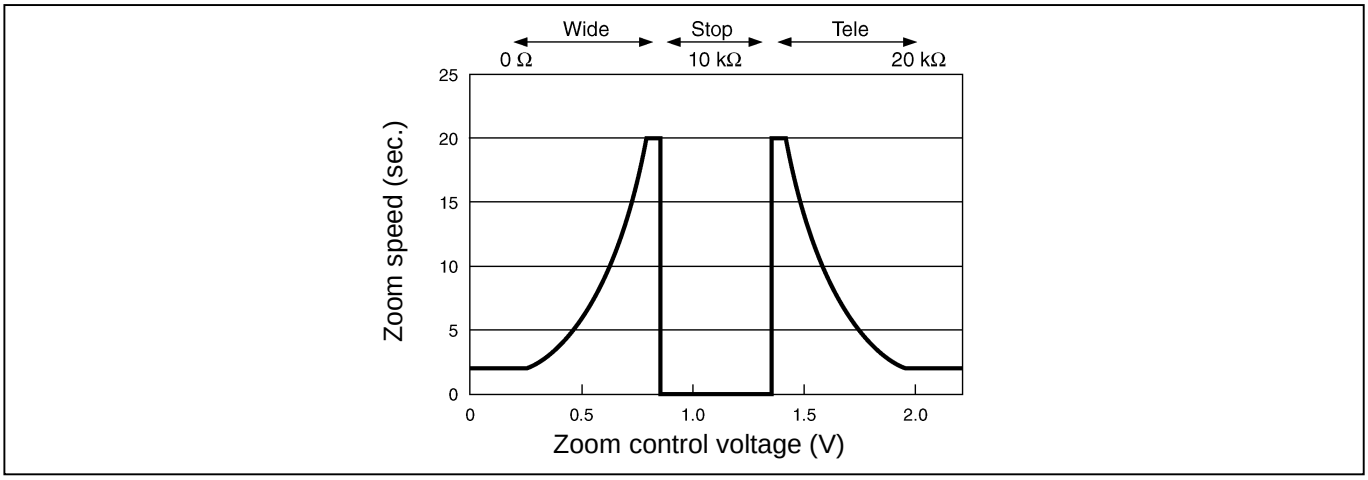
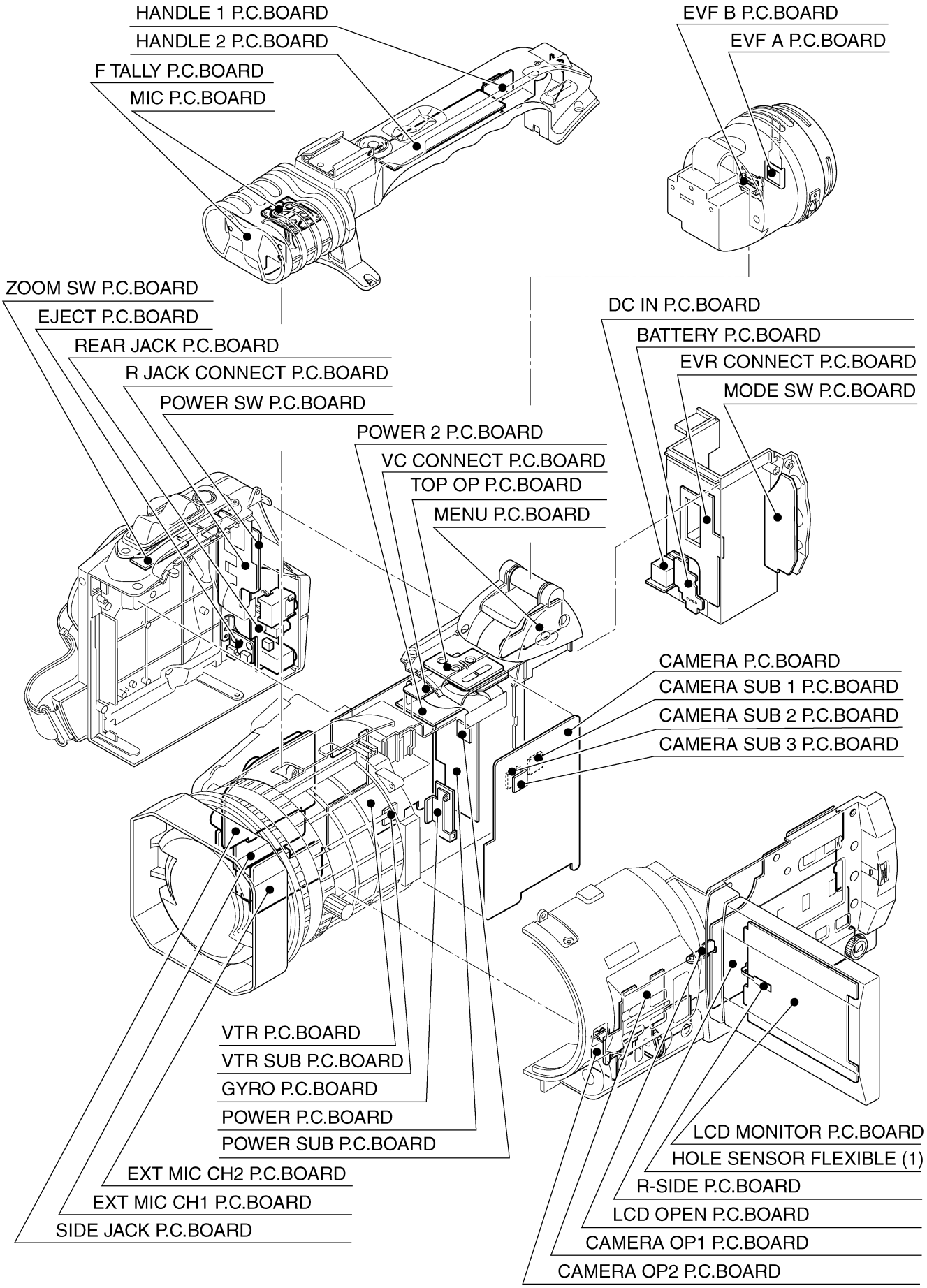


Figure B

7. CIRCUIT BOARD LAYOUT

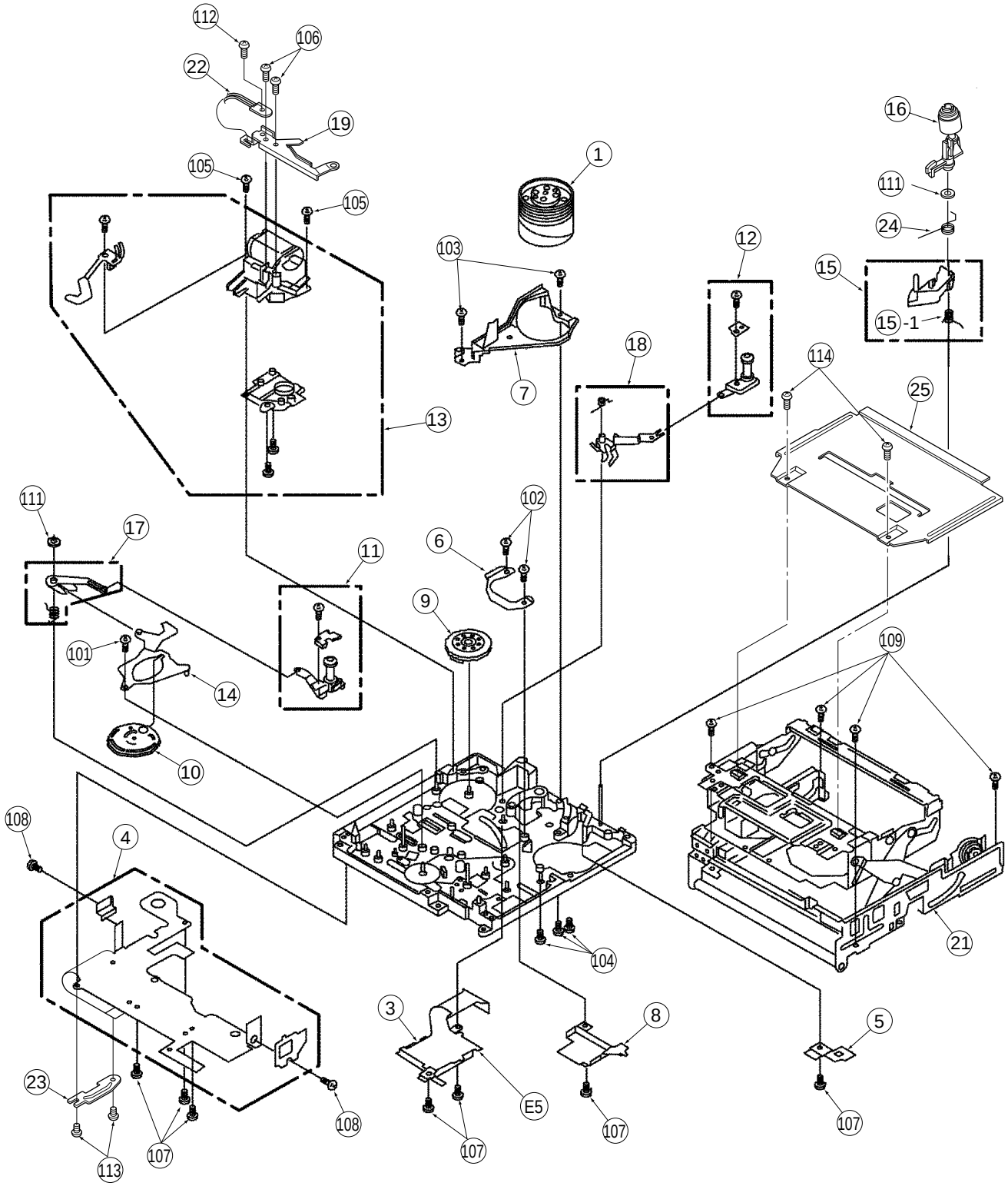


SERVICING FIXTURES & TOOLS

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VFM3010EDS	DV ALIGNMENT TAPE (COLOR BAR)	1	
2	VFM3000EDS	DV ALIGNMENT TAPE (LINEARITY)	1	
3	VFK1217	TAPE END/BEG DET CASSETTE	1	
4	VFK1811	EVR ADJ. SOFTWARE	1	
5	VFK1308P	MEASURING BOARD	1	
6	VFK1309A	EVR CONNECTOR BOARD	1	
7	VFK1694	EVR EXTENDER BOARD	1	
8	VJA0941	DC CABLE	1	
9	VFK1317	30PIN FLAT CABLE	1	
10	VFK1809	72MM ATTACHMENT RING	1	
11	VFK1164TAR43	43MM ATTACHMENT RING	1	
12	VFK1164TCM01	COLLIMATOR SET	1	(INFINITY LENS)
13	VFK1341	CC FILTER (LB40)	1	
14	VFK1347	CC FILTER (LB120)	1	
15	VFK1345	CC FILTER HOLDER	1	
16	VFK1346	STEP DOWN RING	1	
17	VFK1659	STEP-UP RING	1	(43MM-49MM)
18	VFK1660	STEP-UP RING	1	(49MM-62MM)
19	VFK1481E	LISTA SOFTWARE	1	
20	VFK1409A	MEASURING BOARD	1	
21	VFK1233	MECH. NEUTRAL PLATE	1	
22	VFK1266	GEAR DRIVER	1	
23	VFK1149	POST DRIVER	1	
24	VFK1151	NUT DRIVER (2.5MM)	1	
25	VFK1810	LISTA MEASURING BOARD	1	
26	VFK1186	LISTA CABLE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

MECHANICAL CHASSIS ASSEMBLY (1)

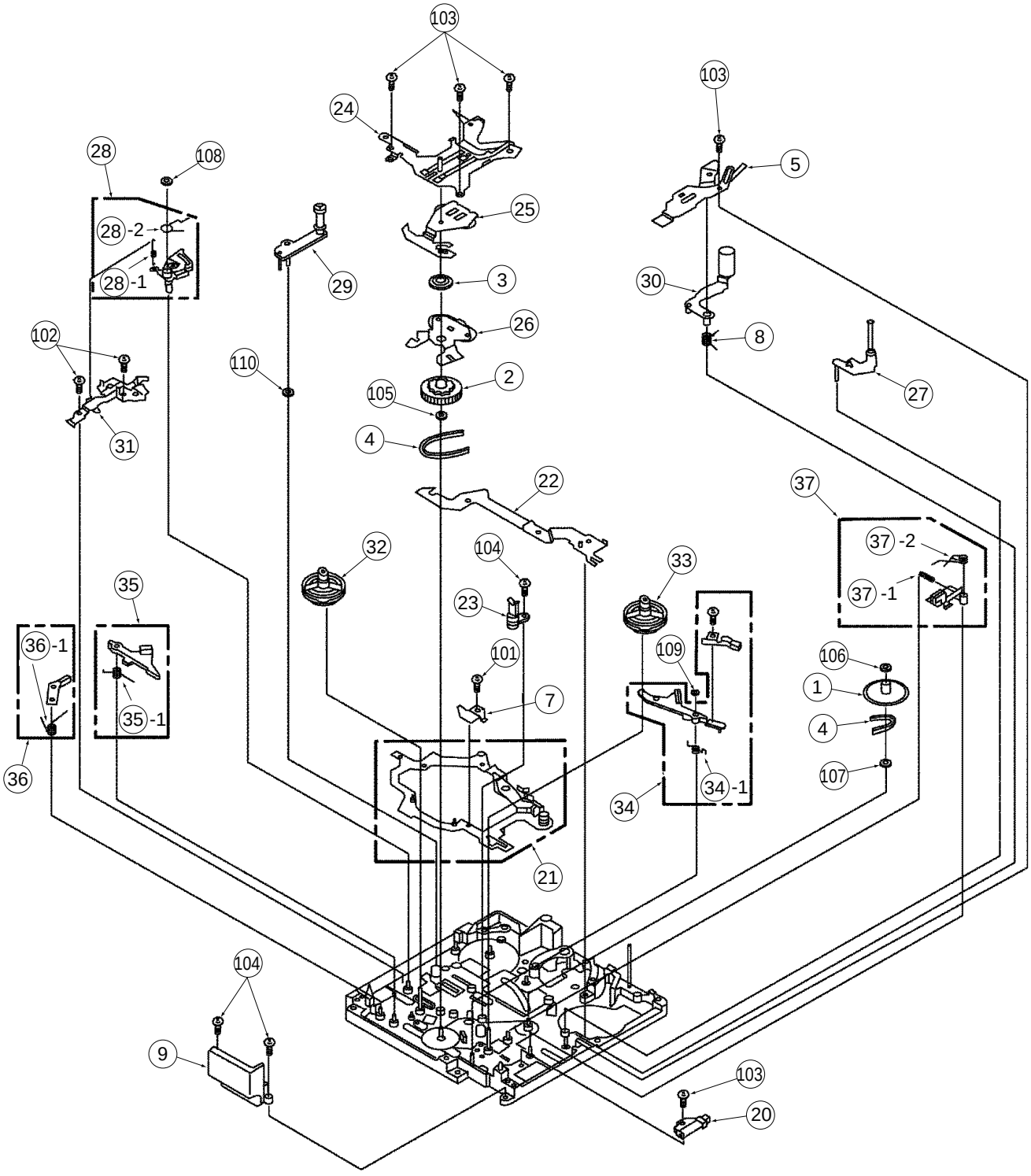


MECHANICAL CHASSIS ASSEMBLY (1)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VEG1573	CYLINDER UNIT	1	(M)
3	VSC4639	SHIELD CASE	1	
4	VES0928	FLEXIBLE CABLE	1	
5	VMA0D82	CAPSTAN COVER	1	
6	VMA9179	RADON PLATE	1	
7	VMD2373	RAIL	1	
8	VSC4640	SHIELD CASE	1	
9	VSR0114	MODE SW	1	(M)
10	VXA5407	CAM GEAR	1	(M)
11	VXA5409	S BOAT ASS'Y	1	(M)
12	VXA5410	T BOAR ASS'Y	1	(M)
13	VXA5417	GEAR BOX	1	(M)
14	VXA5612	RADON ARM ASS'Y	1	
15	VXL2461	T2 ARM ASS'Y	1	
15-1	VMB2789	T2 ARM SPRING	1	
16	VXL3103	CLEANING ARM ASS'Y	1	(M)
17	VXL2470	S1 ARM ASS'Y	1	
18	VXL2471	T1 ARM ASS'Y	1	
19	VMA0P25	CYLINDER HOLD ANGLE	1	
21	VXA5387	GARAGE ASS'Y	1	
22	EYHS77Y7	DEW SENSOR ASS'Y	1	
23	VMD4706	FLEX HOLDER	1	
24	VMB3518	CLEANING SPRING	1	
25	VMP7361	CASSETTE BLINDER PLATE	1	
101	VHD0878	SCREW	1	
102	VHD0989	SCREW	2	
103	XQN14+B4	SCREW	2	
104	VXQ0439	SCREW	3	
105	XQN14+B35	SCREW	2	
106	XQN14+BQ4	SCREW	2	
107	XQN14+B15	SCREW	7	
108	XQN14+B2	SCREW	2	
109	VHD0882	SCREW	4	
111	VMX2027	CUT WASHER	2	
112	XQN2+CF3	SCREW	1	
113	VHD1285	SCREW	2	
114	XQN2+B2FZ	SCREW	2	
E5	VEP05395A	HEAD AMP C.B.A.	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

MECHANICAL CHASSIS ASSEMBLY (2)



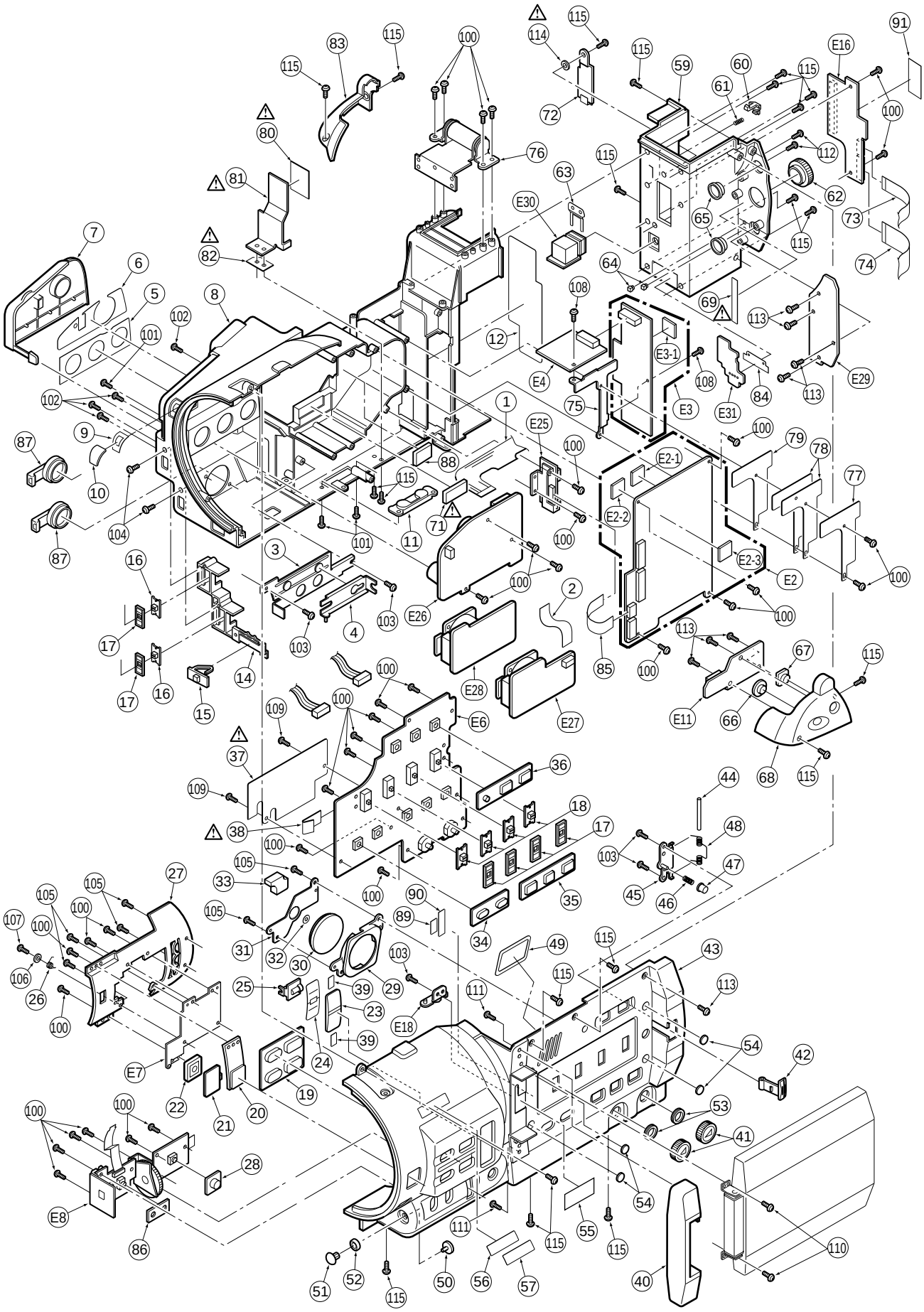
MECHANICAL CHASSIS ASSEMBLY (2)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VDG1445	DRIVE PULLEY	1	
2	VDG1031	CENTER PULLEY	1	
3	VDG1032	SENSOR GEAR	1	
4	VDV0265	TIMING BELT	1	
5	VMA9178	PINCH PRESSURE PLATE	1	
7	VMA9181	BRAKE ROD SUPPORT (T)	1	
8	VMB2776	SPRING	1	
9	VSH0067	MIC SWITCH	1	K0MZ55000001
20	VSJ0114	SOLENOID	1	
21	VXA5401	BRAKE ROD ASS'Y	1	
22	VXA5408	T3 ROD ASS'Y	1	
23	VXA5411	LED HOLDER ASS'Y	1	
24	VXA6576	COVER PLATE ASS'Y	1	
25	VXL2454	P IDLER ARM ASS'Y	1	
26	VXL2455	FR IDLER ARM ASS'Y	1	
27	VXL2456	TENSION ARM ASS'Y	1	(M)
28	VXL2732	PAD ARM ASS'Y	1	(M)
28-1	VMB2788	TENSION SPRING	1	
28-2	VMB2787	PAD ARM SPRING	1	
29	VXL2462	T3 ARM ASS'Y	1	
30	VXL3161	PINCH ARM ASS'Y	1	(M)
31	VXL2466	EJECT ARM ASS'Y	1	
32	VXR0355	SUPPLY REEL TABLE	1	(M)
33	VXR0356	TAKE UP REEL TABLE	1	(M)
34	VXZ0319	TAKE UP MAIN BRAKE	1	
34-1	VMB2782	T MAIN BRAKE SPRING	1	
35	VXZ0321	SUPPLY MAIN BRAKE	1	(M)
35-1	VMB2783	S MAIN BRAKE SPRING	1	
36	VXZ0322	FF BRAKE ASS'Y	1	(M)
36-1	VMB2784	FF BRAKE SPRING	1	
37	VXZ0441	REV BRAKE ASS'Y	1	
37-1	VMB3388	REV SPRING	1	
37-2	VMB3389	REV BRAKE SPRING	1	
101	VHD0884	SCREW	1	
102	XQN14+B15	SCREW	2	
103	VHD0883	SCREW	5	
104	XQN14+B35	SCREW	3	
105	VMX2503	C PULLEY WASHER	1	
106	VMX3122	WASHER	1	
107	VMX2504	WASHER	1	
108	VMX2027	CUT WASHER	1	
109	VMX2028	WASHER	1	
110	VMX2394	WASHER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

FRAME & CASING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.



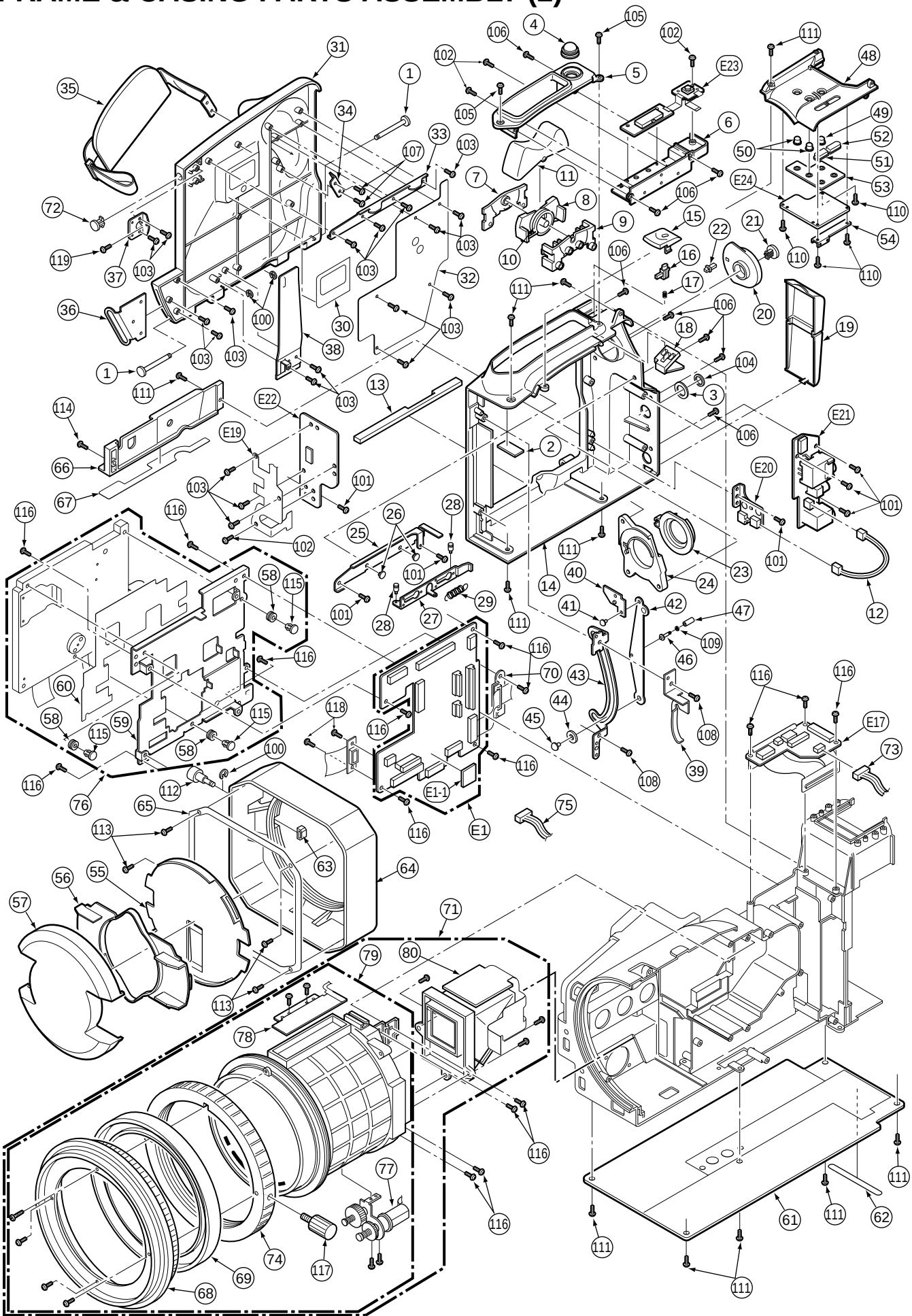
FRAME & CASING PARTS ASSEMBLY (1)

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VWJ1583	SIDE JACK FLEX.	1	
2	VWJ10E5050L0	FLAT CABLE	1	
3	VML3710	CLUTCH SLIDE PLATE	1	
4	VMP7341	CLUTH ANGLE	1	
5	VGH4612	JACK NAME PLATE B	1	
6	VGH4615	JACK NAME PLATE A	1	
7	VJF1470	SIDE JACK CAP	1	
8	VKM5983	CENTER FRAME	1	
9	VMZ3318	AWB COVER HOLDER SHEET	1	
10	VKW3078	AWB WINDOW	1	
11	VMD3345	TRIPOD FRAME	1	
12	VMZ3323	EVR INSULATION SHEET	1	
14	VGQ6902	MIC SWITCHING KNOB HOLDER	1	
15	VGU9246	ZOOM CLUCH KNOB	1	
16	VGU9194	MIC SWITCHING KNOB	2	
17	VMG1460	SLIDE SW RUBBER COVER	6	
18	VGU9214	SLIDE KNOB	4	
19	VGU9200	CAMERA OP BUTTON	1	
20	VGQ6896	FOCUS KNOB HOLDER	1	
21	VGU9213	FOCUS SLIDE KNOB	1	
22	VGU9211	FOCUS BUTTON	1	
23	VGQ6894	ND SWITCHING PIECE	1	
24	VGQ6906	HOLDER BLIND SHEET	1	
25	VGU9222	ND SWITCHING KNOB	1	
26	VMB3681	FOCUS KNOB SPRING	1	
27	VGQ6905	ND FILTER HOLDER	1	
28	VGU9228	IRIS BUTTON	1	
29	VGQ6897	SPEAKER HOLDER	1	
30	VEK9842	SPEAKER ASS'Y	1	
31	VMP7330	SPEAKER HOLDER ANGLE	1	
32	VMT1347	SPEAKER HOLDER CUSHION	1	
33	VMT1367	P.C.B. HOLDER CUSHION	1	
34	VGU9250	RUBBER BUTTON 2	1	
35	VGU9251	RUBBER BUTTON 3	1	
36	VGU9202	RUBBER BUTTON 1	1	
⚠ 37	VSC5460	SIDE (R) SHIELD PLATE	1	
⚠ 38	VMZ3317	C.B.A. PROTECT SHEET	1	
39	VGQ7175	ND KNOB SHEET	2	
40	VGQ6874	HINGE COVER	1	
41	VGU9212	AUDIO ROTATING KNOG	2	
42	VGU9197	MONITOR LOCK KNOB	1	
43	VGP5800	SIDE CASE (R)	1	
44	VMS7187	LCD LOCK SHAFT	1	
45	VMP7331	OPENER HOLDER ANGLE	1	
46	VMB3661	POP UP SPRING	1	
47	VGQ6901	MONITOR KNOB	1	
48	VMB3659	MONITOR OPENER SPRING	1	
49	VKN0169	SPEAKER NET	1	
50	VGU9223	W.BAL KNOB (LOWER)	1	
51	VGU9217	W.BAL KNOB (UPPER)	1	
52	VMG1418	RAIN COVER RUBBER (B)	1	
53	VMG1467	VR WATERPROOF RUBBER	2	
54	VMG1286	CUSHION RUBBER	4	
55	VMZ3316	MONITOR FPC PROTECT SHEET	1	
56	VGQ4088	3CCD BADGE TAPE	1	
57	VGB0322	3CCD BADGE	1	
59	VGP5813	BACK PANEL	1	
60	VGU8582	BATTERY LOCK BUTTON	1	
61	VMB3210	BATTERY LOCK SPRING	1	
62	VGU9218	MODE SELECT KNOB	1	
63	VMP7340	DCIN ANGLE	1	
64	VGL1012	MODE PANEL LIGHT	2	
65	VGU9219	CAMERA/VCR BUTTON	2	
66	VGU9209	JOY STICK BUTTON	1	
67	VGU9199	MENU BUTTON	1	
68	VGQ6924	VF CASE (R)	1	
⚠ 69	VMZ3315	BATTERY BLIND SHEET	1	
⚠ 71	VMG1516	CCD HEAT SINK SHEET	1	
72	VGQ6886	EVR COVER	1	
73	VWJ13E5085L0	FLEX. CABLE	1	
74	VWJ1585	R SIDE FPC	1	
75	VMP7357	C.B.A. HOLDER ANGLE	1	
76	VKC0594	VF HINGE	1	
77	VMZ3340	SHIELD INSULATION PLATE 1	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
78	VSC5478	CAMERA C.B.A. SHIELD	2	
79	VMZ3341	SHIELD INSULATION PLATE 2	1	
⚠ 80	VMG1514	POWER HEAT SINK SHEET 1	1	
⚠ 81	VSC5471	POWER HEAT SINK SHEET	1	
⚠ 82	VMG1515	POWER HEAT SINK SHEET 2	1	
83	VGQ6923	VF CASE (L)	1	
84	VEK8719	BATTERY CATHER	1	K4ZZ04000026
85	VWJ10E5050L0	FLAT CABLE	1	
86	VMG1520	TOGGLE SW CUSHION	1	
87	VJF1468	XLR CAP	2	
88	VMG1517	CCD HEAT SINK	1	
89	VMZ3356	FPC PROTECT SHEET	1	
90	VMZ3357	FPC LOCK SHEET	1	
91	VMZ3345	LED INSULATION PLATE	1	
100	XQN2+B4FN	SCREW	35	
101	XQN16+B4FZ	SCREW	3	
102	XYN26+A6FZ	SCREW	4	
103	XYN2+C4	SCREW	5	
104	XQN16+BJ4FZ	SCREW	2	
105	XQN2+C5	SCREW	6	
106	XWG2	WASHER	1	
107	XQN16+BJ3FZ	SCREW	1	
108	XQN2+B35FN	SCREW	2	
109	XYN2+F5	SCREW	2	
110	XYN2+C6	SCREW	2	
111	XQN2+BJ6	SCREW	2	
112	XQN2+B3FZ	SCREW	2	
113	XQN2+BJ4FZ	SCREW	8	
⚠ 114	VMX3286	WASHER	1	
115	XQN2+B4FZ	SCREW	21	
E2	VEP23571A	CAMERA C.B.A.	1	
E2-1	VEP001A7A	CAMERA SUB 1 C.B.A.	1	
E2-2	VEP001A7B	CAMERA SUB 2 C.B.A.	1	
E2-3	VEP001A7C	CAMERA SUB 3 C.B.A.	1	
E3	VEP01914A	POWER C.B.A.	1	
E3-1	VEP001A6A	POWER SUB C.B.A.	1	
E4	VEP01922A	POWER 2 C.B.A.	1	
E6	VEP04817A	R-SIDE C.B.A.	1	
E7	VEP06E92A	CAMERA OP1 C.B.A.	1	
E8	VEP06E93A	CAMERA OP2 C.B.A.	1	
E11	VEP000Z0A	MENU C.B.A.	1	
E16	VEP000Y2A	EVR CONNECT C.B.A.	1	
E18	VEP000Y4A	LCD OPEN SW C.B.A.	1	
E25	VEP22331A	GYRO C.B.A.	1	
E26	VEP04816A	SIDE JACK C.B.A.	1	
E27	VEP04815A	EXT MIC CH2 C.B.A.	1	
E28	VEP04825A	EXT MIC CH1 C.B.A.	1	
E29	VEP06E89A	MODE SW C.B.A.	1	
E30	VEP01923A	DC IN C.B.A.	1	
E31	VEP01915A	BATTERY C.B.A.	1	

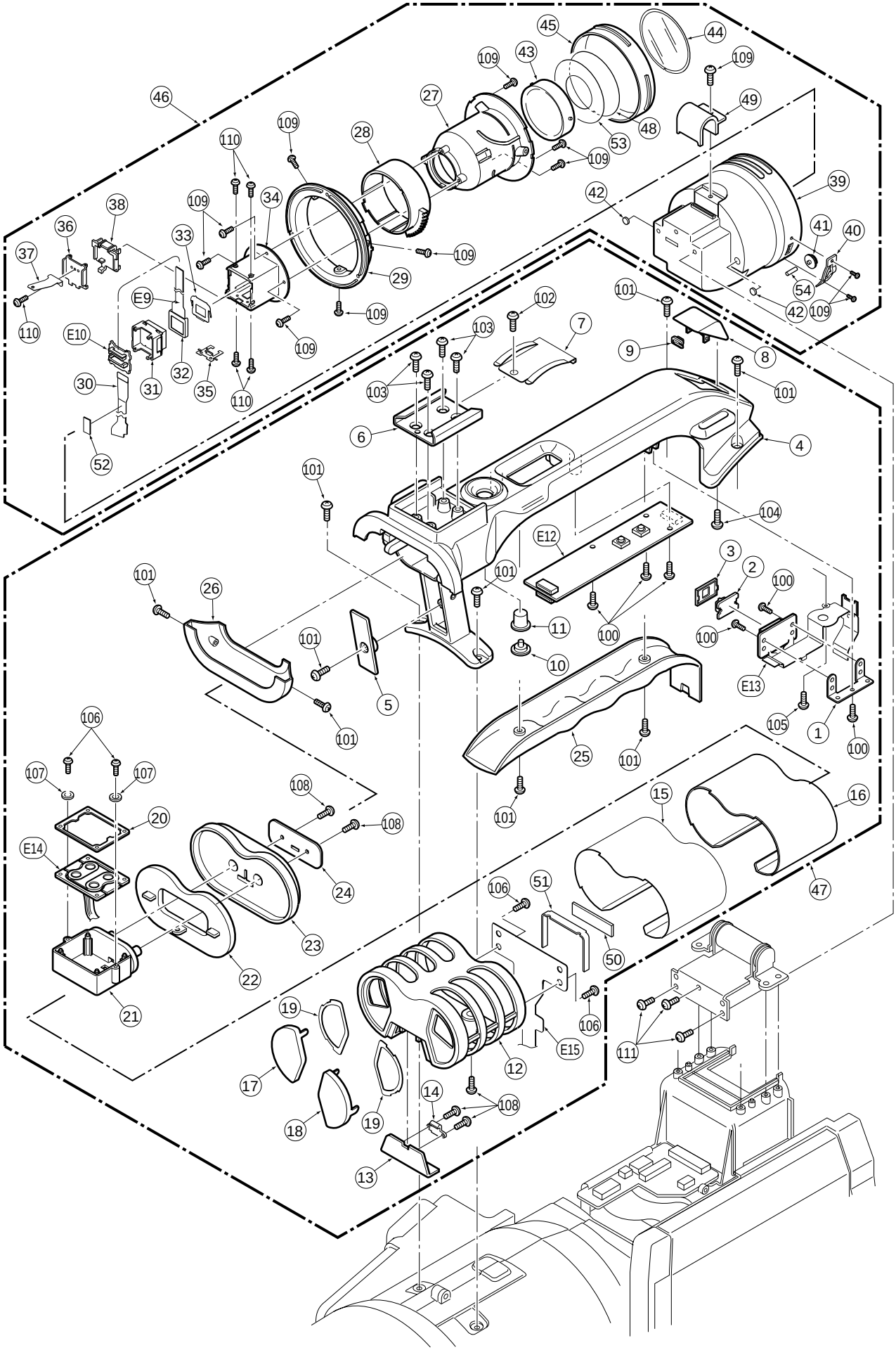
FRAME & CASING PARTS ASSEMBLY (2)



FRAME & CASING PARTS ASSEMBLY (2)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VMS7186	ROTATING SHAFT	2	
2	VMZ3097	POWER INSULATION SHEET C	1	
3	VMX0531	CLATCH SPACER	1	
4	VGU9203	REC CHECK RUBBER BUTTON	1	
5	VGQ6903	ZOON LEVER CASE (R)	1	
6	VGQ6904	ZOON LEVER CASE (L)	1	
7	VGQ6996	ZOOM HOLDER (R)	1	
8	VGQ6997	ZOOM SPRING HOLDER PIECE	1	
9	VGQ6928	ZOOM SW HOLDER	1	
10	VMB3663	COIL SPRING ZOOM	1	
11	VGU9215	ZOOM LEVER	1	
12	VEE0U25	EJECT 1	1	
13	VMT1350	CASSETTE COVER GASKET	1	
14	VGP5801	SIDE CASE (L)	1	
15	VGU9206	EJECT KNOB	1	
16	VGU9216	EJECT LOCK BUTTON	1	
17	VMB3662	EJECT LOCK BUTTON SPRING	1	
18	VGQ6899	EJECT KNOB FIX PIECE	1	
19	VJF1469	H.P CAP	1	
20	VGU9204	POWER BUTTON	1	
21	VGU9205	S/S BUTTON	1	
22	VGU9201	POWER LOCK BUTTON	1	
23	VGQ6998	S/S BUTTON HOLDER	1	
24	VGQ6884	S/S HOLDER PIECE	1	
25	VMP7337	LOCK LEVER HOLDER ANGLE	1	
26	VMS7211	PIN	2	
27	VMP7339	CASSETTE LOCK LEVER	1	
28	VMS7203	EJECT LOCK PIN	2	
29	VMB3680	EJECT LOCK BUTTON SPRING	1	
30	VGH4613	GRIP COVER WINDOW	1	
31	VGP5804	CASSETTE COVER	1	
32	VGF0952	SHIELD PLATE	1	
33	VMP7338	CASSETTE COVER FIX ANGLE	1	
34	VMP6741	BELT HOLDER ANGLE	1	
35	VFB0215	GRIP BELT	1	
36	VMP7325	GRIP BELT ANGLE (FRONT)	1	
37	VMP7501	HOLDER ANGLE	1	
38	VMC1092	CASSETTE DOWN SPRING	1	
39	VMC1835	LINK DUMPER SPRING	1	
40	VMA9219	OPEN ANGLE (A)	1	
41	VMS5748	LINK PIN (B)	1	
42	VMA9220	OPEN LINK (B)	1	
43	VMA0P91	LINK ANGLE	1	
44	VMX2397	ARM STAND ROLLER	1	
45	VMS7293	ARM STAND PIN	1	
46	VMS5747	RINK PIN (A)	1	
47	VDP1653	ROTATION ROLLER	1	
48	VGP5798	TOP PANEL	1	
49	VGU9195	REC BUTTON	1	
50	VGU9210	REC/DUB BUTTON	2	
51	VGU9249	AUDIO MONITOR BUTTON (-)	1	
52	VGU9196	AUDIO MONITOR BUTTON (+)	1	
53	VMG1478	TOP SW BUTTON RUBBER	1	
54	VMP7432	TOP SUPPORT ANGLE	1	
55	VGQ6919	CAP COVER	1	
56	VGQ6920	LENS COVER KNOB	1	
57	VGQ6883	LENS CAP	1	
58	VMG1463	DUSTPROOF RUBBER	3	
59	VMP7336	MECHA HOLDER ANGLE	1	
60	VMZ3295	MECHA BARRIER	1	
61	VGQ6885	BOTTOM COVER	1	
62	VKA0340	GLIP DUSTPROOF RUBBER	1	
63	VGU9255	HOOD FIX PIECE	1	
64	VGQ6882	LENS HOOD	1	
65	VMP7605	LENS HOOD WINDOW	1	
66	VGQ7077	MECHA DUSTPROOF COVER	1	
67	VMT1348	CASSETTE COVER GASKET (U)	1	
68	VXP2212	FOCUS RING ASS'Y	1	
69	VDW0855	FIX RING ASS'Y	1	
70	VJF1472	FLEX. HOLDER	1	
71	VXW0563	CAMERA LENS ASS'Y	1	
72	VGQ7078	RUBBER CAP	1	
73	VEE0T92	INT MIC	1	
74	VDW0854	ZOOM RING	1	
75	VEE0T93	MIK IO	1	
76	VXY1738S	MECHA CHASSIS ASS'Y	1	(M)
77	L6DABFKD0001	ZOOM MOTOR ASS'Y	1	
78	EVAJGGVA3B14	ZOOM ENCODER	1	
79	VXW0565	LENS ASS'Y	1	
80	VXQ1083	PRISM ASS'Y	1	
100	XUC15FX	E-RING	3	
101	XQN2+B3FN	SCREW	7	
102	XQN16+BJ3FZ	SCREW	4	
103	XQN2+BJ4FZ	SCREW	19	
104	VHN0194	SPACER	1	
105	XQN16+B4FZ	SCREW	2	
106	XQN16+BJ4FZ	SCREW	8	
107	XTB26+6GFZ	SCREW	2	
108	XYN2+C6	SCREW	2	
109	VMX2535	WASHER	1	
110	XQN2+B35FN	SCREW	4	
111	XQN2+B4FZ	SCREW	11	
112	VHD1546	SCREW	1	
113	XQN2+BJ5FZ	SCREW	4	
114	XQN2+C6FZ	SCREW	1	
115	VHD1100	SCREW	3	
116	XQN2+B4FN	SCREW	16	
117	VHD1538	SCREW	1	
118	VHD0866	SCREW	2	
119	XYN2+C6	SCREW	1	
E1	VEP03G21A	VTR C.B.A.	1	
E1-1	VEP001A4A	VTR SUB C.B.A.	1	
E17	VEP000Y3A	VC C0NNECT C.B.A.	1	
E19	VEP000Y6A	R JACK CONNECT C.B.A.	1	
E20	VEP000Y7A	EJECT C.B.A.	1	
E21	VEP04819A	REAR JACK C.B.A.	1	
E22	VEP06E96A	POWER SW C.B.A.	1	
E23	VEP06E90A	ZOOM SW C.B.A.	1	
E24	VEP000Y9A	TOP OP C.B.A.	1	

HANDLE & EVF PARTS ASSEMBLY

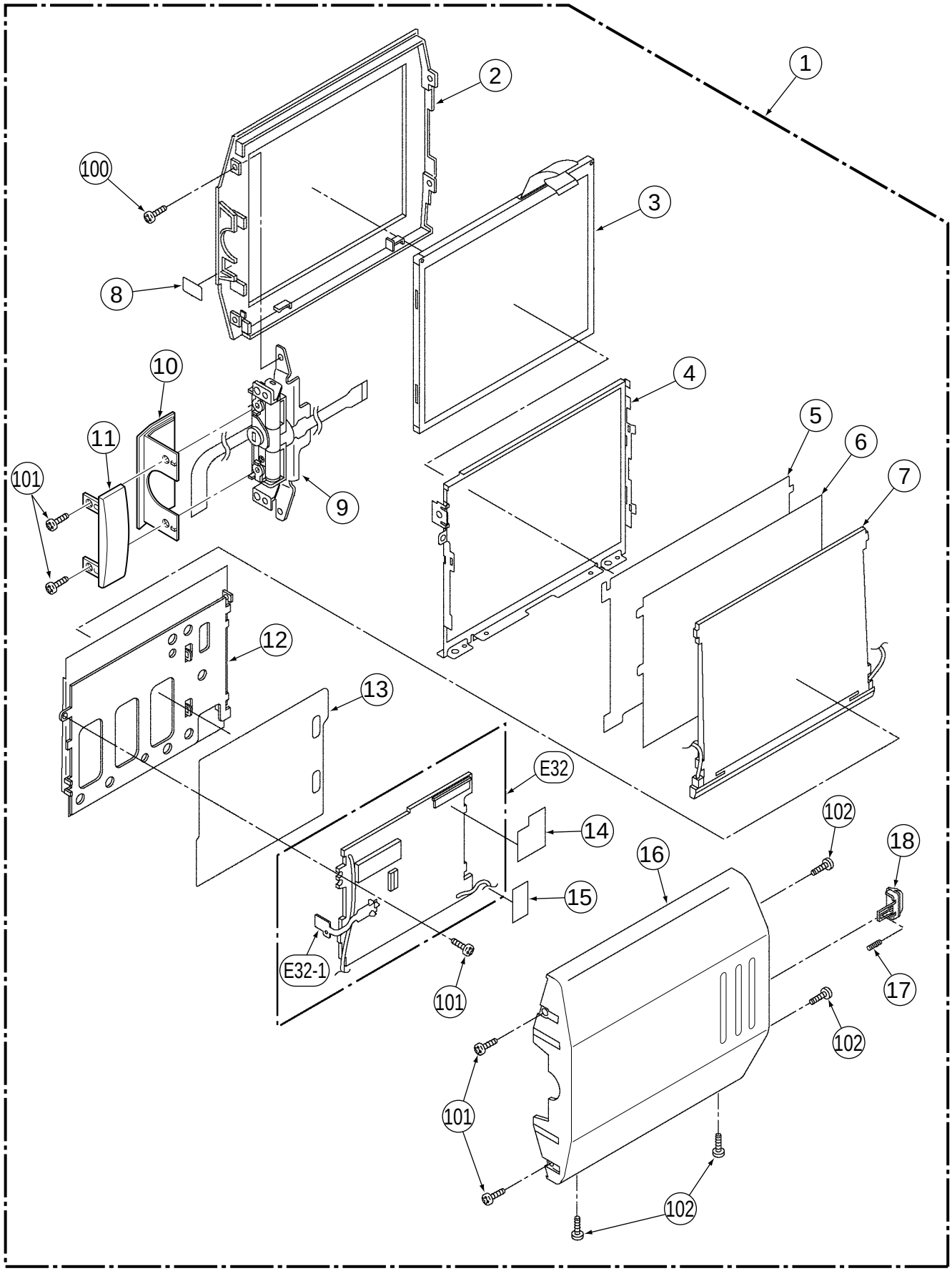


HANDLE & EVF PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VMP7328	HANDLE SLIDE ANGLE	1	
2	VGU9214	SLIDE KNOB	1	
3	VMG1460	SLIDE SW RUBBER COVER	1	
4	VKH0410	HANDLE	1	
5	VGQ6888	HANDLE FRONT COVER	1	
6	VJF1421	SHU	1	
7	VMC1697	SPRING	1	
8	VKW3080	REAR TALLY COVER	1	
9	VGL1011	TALLY LIGNT	1	
10	VMG1479	HANDLE S/S BUTTON RUBBER	1	
11	VGU9207	HANDLE S/S BUTTON	1	
12	VGQ6872	MIC CASE	1	
13	VKW3079	FRONT TALLY COVER	1	
14	VKW3081	FRONT TALLY LIGHT	1	
15	VKN0168	MIC NET (SIDE)	1	
16	VGQ6876	FRONT PUNCHING PANEL 1	1	
17	VGQ6921	FRONT PUNCHING PANEL 2	1	
18	VGQ6877	FRONT PUNCHING PANEL	1	
19	VKN0167	MIC NET (FRONT)	2	
20	VGQ6352	DUMPER HOLDER PIECE	1	
21	VGQ6891	MIC P.C.B. HOLDER	1	
22	VGQ6878	MIC RUBBER FIX PIECE	1	
23	VMG1459	MIC RUBBER HOLDER	1	
24	VMP7329	MIC HOLDER ANGLE	1	
25	VGQ6873	HANDLE COVER	1	
26	VGQ6887	MIC CASE (LOWER)	1	
27	VDK0173	HELICOID	1	
28	VGQ6879	DIOPTER GEAR	1	
29	VGQ6890	EVF FILTER HOLDER	1	
30	VWJ1586	EVF FPC	1	
31	VMX2967	PB SPACER	1	
32	L5BDDXE00001	ACTIVE MATRIX LCD PANEL	1	
33	VGQ7088	LCD MASK	1	
34	VGQ6926	LCD CASE	1	
35	VMC1612	EVF EARTH SPRING	1	
36	VMP7360	EVF COVER ANGLE	1	
37	VMC1808	EVF EARTH SPRING	1	
38	VGQ6927	EVF COVER	1	
39	VGP5799	EVF CASE	1	
40	VGQ3855	DIOPTER ADJUST BRACKET	1	
41	VGU6944	EYE SIGHT ADJ. DIAL	1	
42	VMG1286	CUSHION RUBBER	2	
43	VXW0567	EVF LENS ASS'Y	1	
44	VDL1348	EVF FILTER	1	
45	VGQ6889	EVF EYE CAP HOLDER	1	
46	VEQ3317	EVF ASS'Y	1	
47	VYH0300	HANDLE ASS'Y	1	
48	VGQ7120	FILTER	1	
49	VGQ6892	EVF HINGE COVER	1	
50	VGF0957	MIC SHADING SHEET	1	
51	VMZ3344	INSULATION PLATE	1	
52	VMZ3361	SHEET	1	
53	VMX3293	SHEET	1	
54	VMS7303	EYE SIGHT KNOB SHAFT	1	
100	XQN2+C4	SCREW	6	
101	XQN2+B4FZ	SCREW	9	
102	XSN2+4FC	SCREW	1	
103	XSS2+4FZ	SCREW	4	
104	XQN2+BJ3FZ	SCREW	1	
105	XYN2+J4	SCREW	1	
106	XQN2+BJ4	SCREW	4	
107	XWG2	WASHER	2	
108	XQN2+BJ5FZ	SCREW	5	
109	XQN2+BJ4FZ	SCREW	12	
110	XQN16+C25FZ	SCREW	5	
111	XQN2+CJ6FZ	SCREW	3	
E9	VEP28272B	EVF A C.B.A.	1	
E10	VEP28275B	EVF B C.B.A.	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
E12	VEP06E95A	HANDLE 1 C.B.A.	1	
E13	VEP06F04A	HANDLE 2 C.B.A.	1	
E14	VEP04828A	MIC C.B.A.	1	
E15	VEP06E94A	F TALLY C.B.A.	1	

LCD PARTS ASSEMBLY

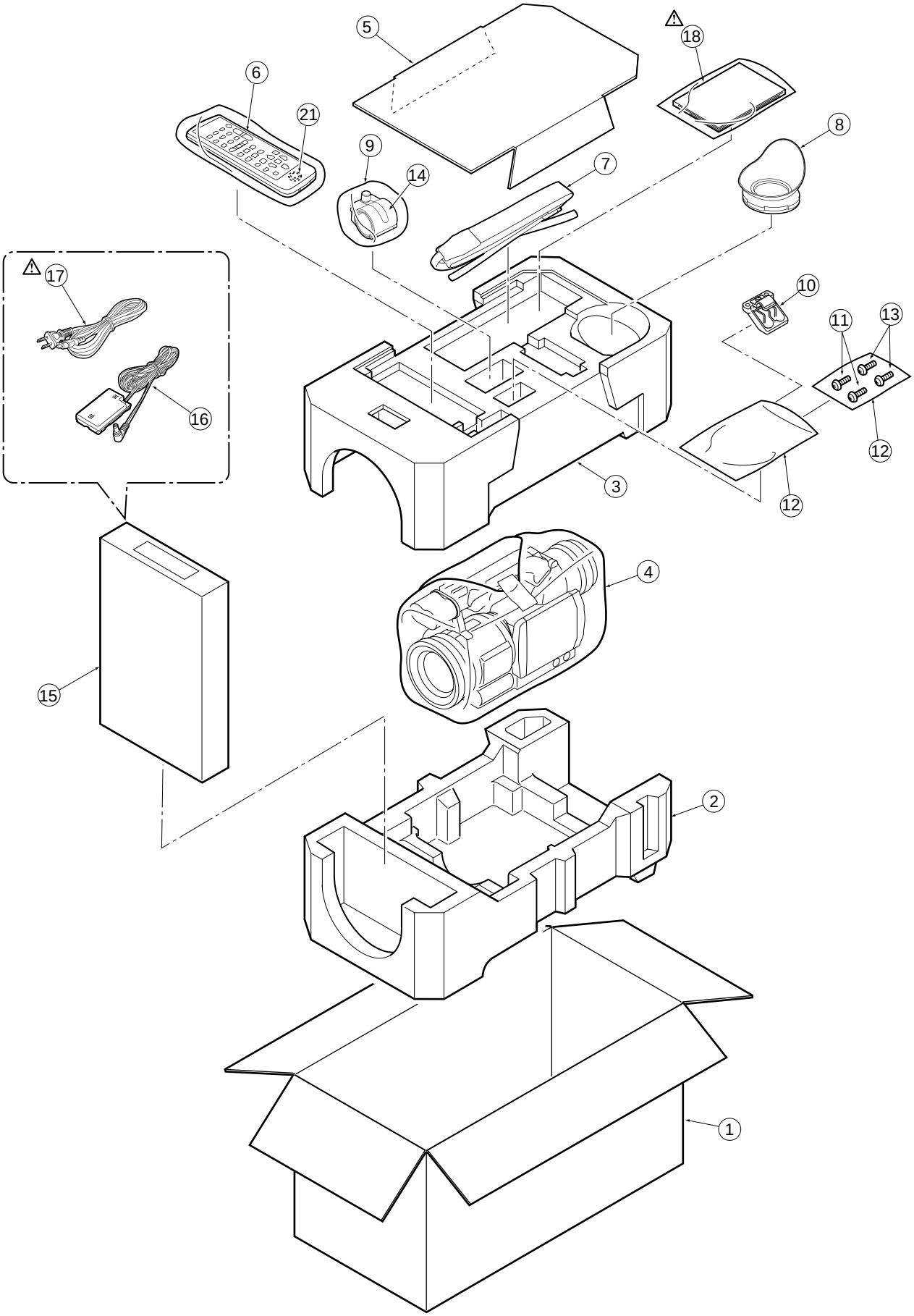


LCD PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYK0K36	LCD ASS'Y	1	
2	VGP5803	LCD CASE (LOWER)	1	
3	L5DDYM00004	LCD PANEL	1	
4	VMP6928	LCD FRAME	1	
5	VGL0917	POLAZING SHEET	1	
6	VGL0916	DIFFUSION SHEET	1	
7	KBLUMJ131VM	BACK LIGHT (1)	1	
8	VGQ4758	BLIND SHEET (A)	1	
9	VXD0357	LCD HINGE (2)	1	
10	VGQ6875	HINGE COVER (LOWER)	1	
11	VGQ6361	HINGE COVER (UPPER)	1	
12	VMP6572	P.C.B. FIX ANGLE	1	
13	VGQ5844	LCD BARRIER	1	
14	VGQ6408	BARRIER (LCD)	1	
15	VGQ5507	BARRIER (LCD-B)	1	
16	VGP5802	LCD CASE (UPPER)	1	
17	VMB3457	LCD LOCK SPRING	1	
18	VGQ6447	LCD LOCK PIECE	1	
100	XQN16+B2FN	SCREW	1	
101	VHD1451	SCREW	5	
102	XQN16+B3FN	SCREW	4	
E32	VEP26257A	MONITOR C.B.A.	1	
E32-1	VEP06E29A	HALL SENSOR FLEX CARD	1	

PACKING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.



PACKING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VPG0Q64	PACKING CASE	1	
2	VPN5826	CUSHION (LOWER)	1	
3	VPN5825	CUSHION (UPPER)	1	
4	VPF0884	POLYETHYLENE BAG	1	
5	VPN5903	PARTITION PLATE	1	
6	VFA0354	WIRELESS REMOTE CONTROL	1	
7	VFC3891	SHOULDER BELT	1	
8	VMG1458	EYE CAP	1	
9	VPF0179	POLYETHYLENE BAG	1	
10	VYC0890	MIC HOLDER ADAPTOR	1	
11	XSB4+6FZ	SCREW	2	
12	VPF1016	POLYETHYLENE BAG	2	
13	XSB4+12FXKS	SCREW	2	
14	VYC0870	MIC HOLDER ASS'Y	1	
15	VPK0825	ACCESSORY BOX	1	
16	VEK8722	DC CABLE ASS'Y	1	
⚠ 17	K2CB2DB00001	POWER CODE	1	
⚠ 18	VQT0A97	OPERATING INSTRUCTIONS	1	
21	CR2025	BATTERY	1	

NTSC

1. MECHANICAL ADJUSTMENT AND CONFIRMATION

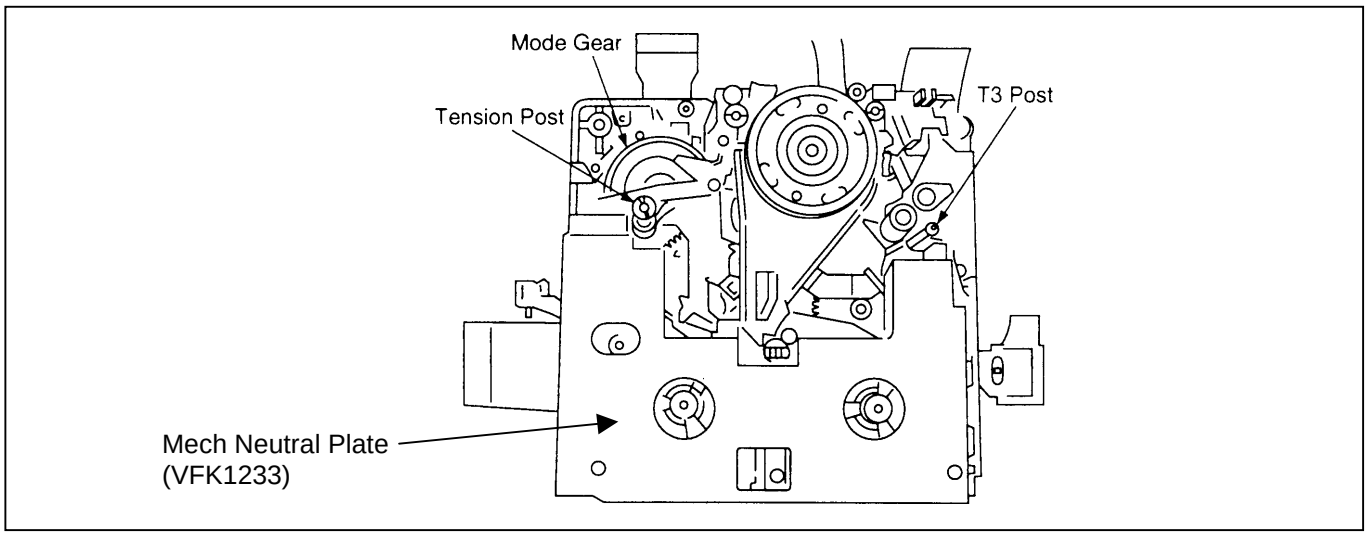
When the following parts are replaced, the mechanical adjustment is required.
Tension Post
T3 Post
Pad Arm Unit
Supply or Take-up Reel Tables

1-1. Tension Post & T3 Post Height Adjustment

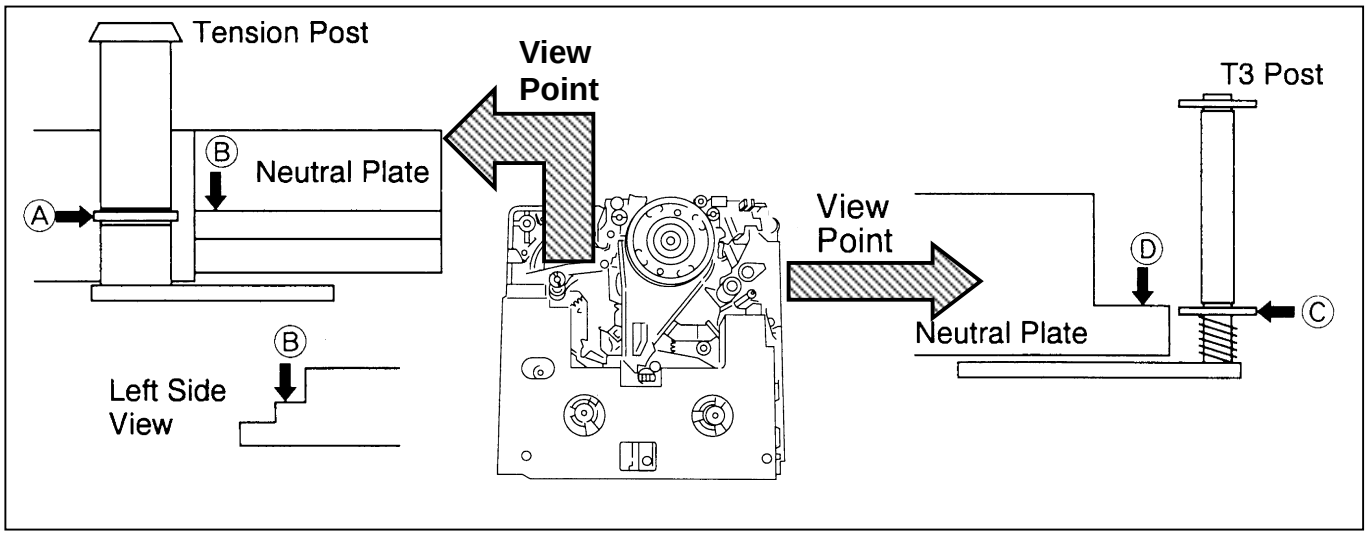
1. Remove the Cylinder Hold Angle and Loading Motor Unit.

NOTE: Not required remove the flexible cable from Loading Motor.

2. Set the Mechanism Plate (VFK1233) on the Mechanism Chassis.
3. Turn the Mode Gear fully clockwise to make full loading condition by using Loading Gear Driver (VFK1266).



4. Adjust the height of Tension Post by VFK1149 so the lower flange (A) point become same height of the top surface (B) of 2nd step of the Mechanism Plate as shown in Figure.
5. Adjust the height of T3 Post by VFK1151 so that the lower flange (C) point become same height of the top surface (D) of the Mechanism Plate as shown in Figure.

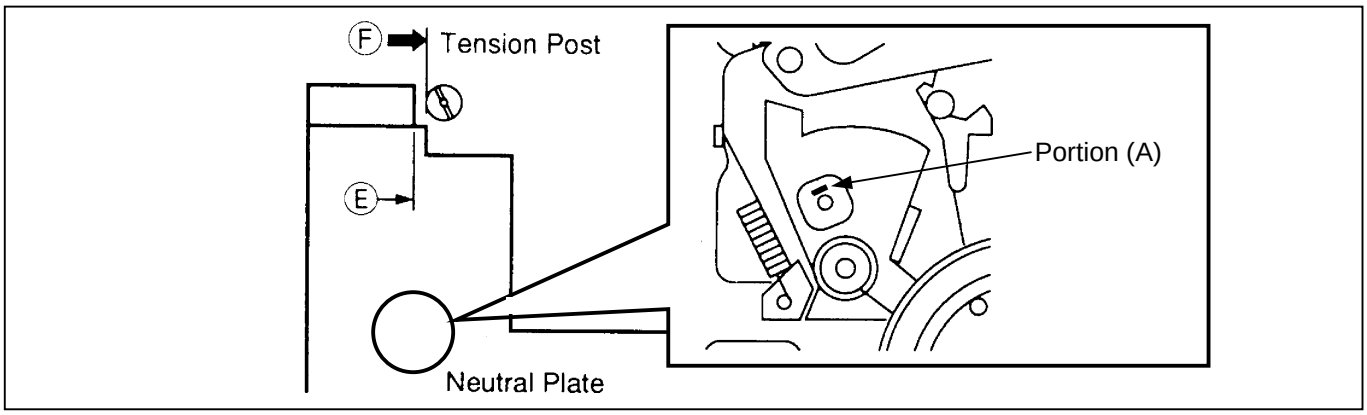


1-2. Tension Post Position Adjustment

1. Remove the Cylinder Hold Angle and Loading Motor Unit.

NOTE: Not required remove the flexible cable from Loading Motor.

2. Turn the Mode Gear to set the Mechanism position in the play mode, that the Soft Brake of the Pad Arm Unit just touch to the Supply Reel Table as shown in Figure.
3. Set the Mechanism Plate on the Mechanism Chassis as shown in Figure.
4. Insert the tip of minus driver to portion(A) as shown in figure and turn clockwise slowly until the surface of the Tension Post comes to 2nd step(“F” Portion of tension post is just touch to “E” portion as shown in figure).



5. After adjustment, turn the Mode Gear to unloading direction then turn back to loading direction, and make sure that position is correct at above specification in Play position.

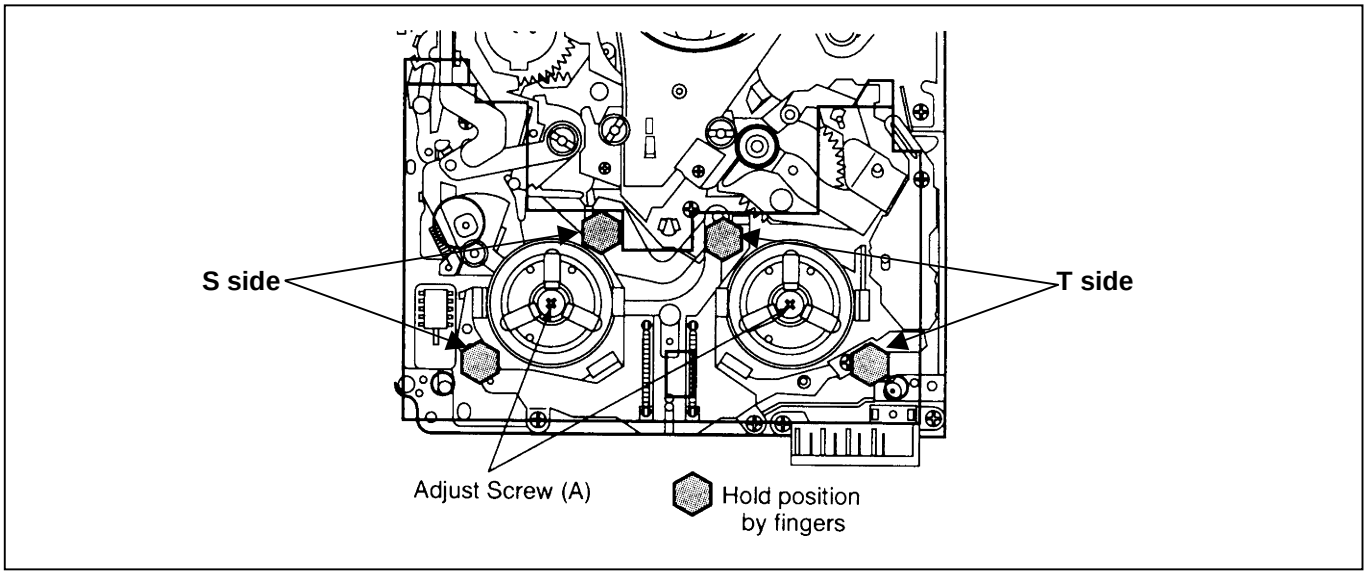
1-3. Supply & Take-up Reel Table Adjustment

This adjustment should be performed for Supply or Take-up Reel Table one by one.

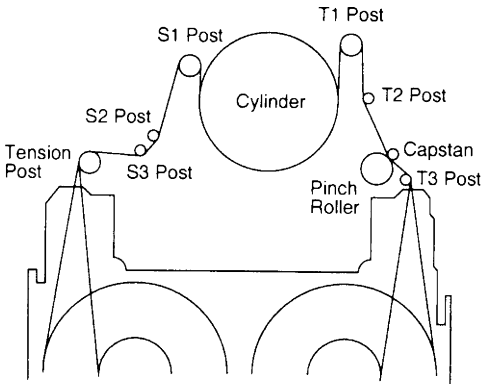
1. Remove the Cylinder Hold Angle and Loading Motor Unit.

NOTE: Not required remove the flexible cable from Loading Motor.

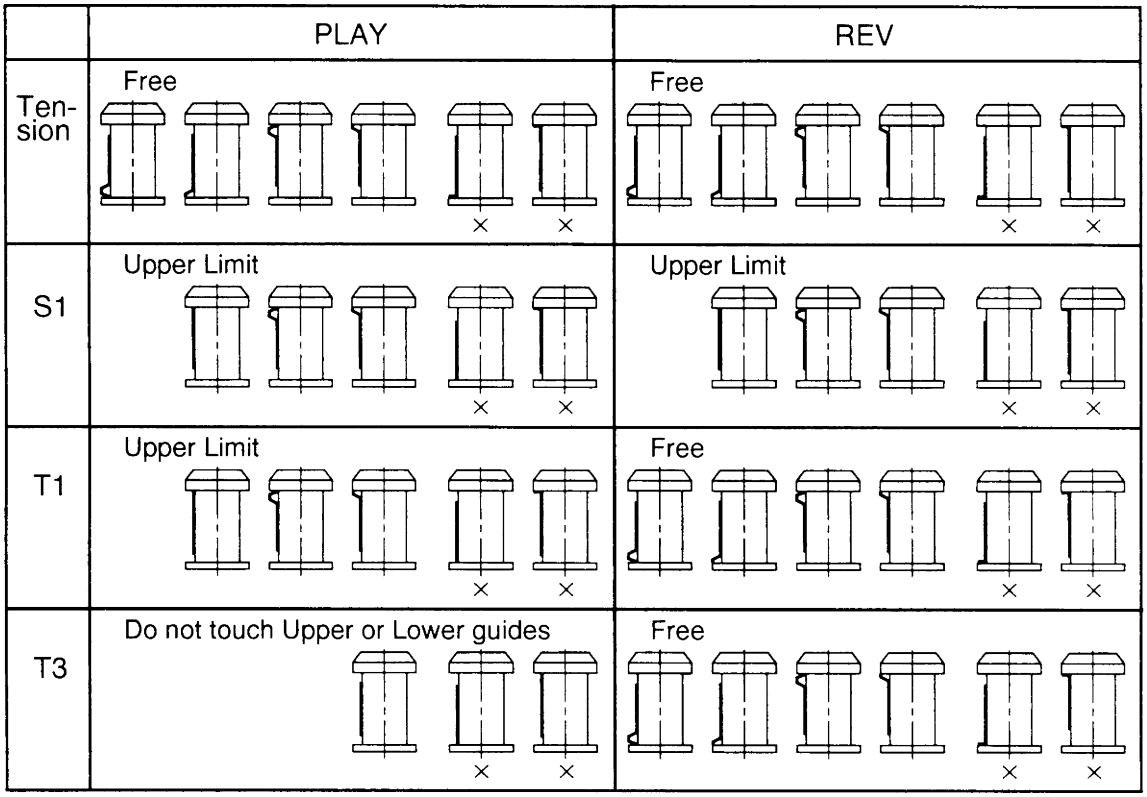
2. Turn the adjustment screw (A) on top of the Supply or Take-up Reel Table fully clockwise. Then, place the Mechanism Plate on the Mechanism Chassis as shown in Figure.
3. Hold the Mechanism plate by finger and slowly turn the adjustment screw counterclockwise until Reel Table just rotate with adjustment screw as shown in Figure.
4. Remove the Mechanism Plate and hold the Reel Table by finger then turn the adjustment screw counterclockwise to 45 degrees from above step point.



1-4. Confirmation of Tape Pass



1. Play back the cassette tape and confirm that the tape pass without curling at the upper and lower guides of the following posts in the Play and REV modes as shown in Figure.

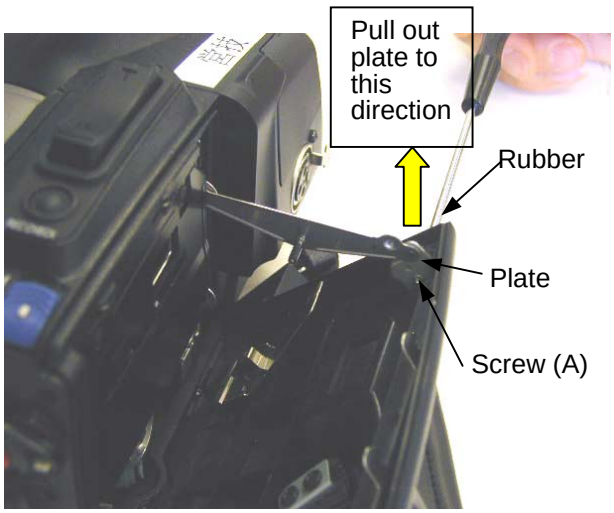


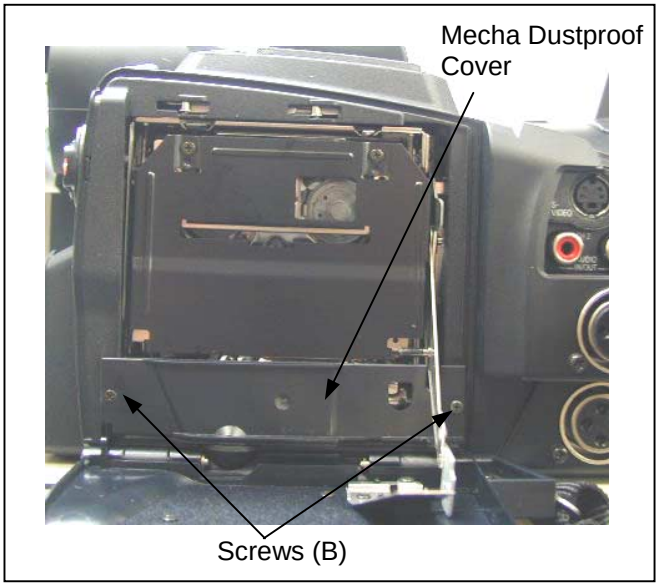
2. If there is curing or damage at the ether guide of posts, readjust the height of the posts by turning the post with the Post Adjustment Driver.

1-5. Confirmation of the Envelope

To adjust envelope waveform, below indicated operation is required.

1. Remove the rubber on Grip Cover Unit.
2. Unscrew the screw (A) and remove the plate from frame.
3. Unscrew the 2 screws (B) and remove the Mecha Dustproof Cover.





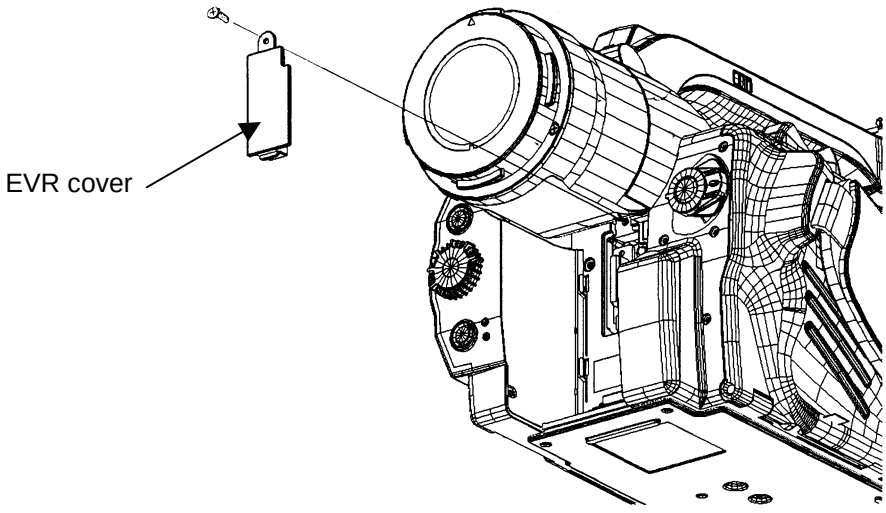
To confirm the envelope output, connect the Connection and Measuring Boards as described below.

For performing the confirmation of envelope, the following tool are required.

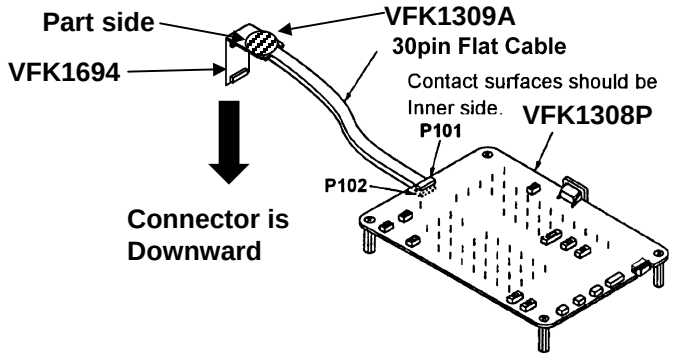
NAME	Part Number	Pcs.	Remark
Measuring Board	VFK1308P	1	
EVR Connector Board	VFK1309A	1	NOTE
EVR Extender Board	VFK1694	1	
30pin Flat Cable	VFK1317	2	
DC Cable	VJA0941	1	
AC Adaptor	-----		

NOTE: VFK1309 can be use to this confirmation and VFK1309A is only required LCD adjustment.

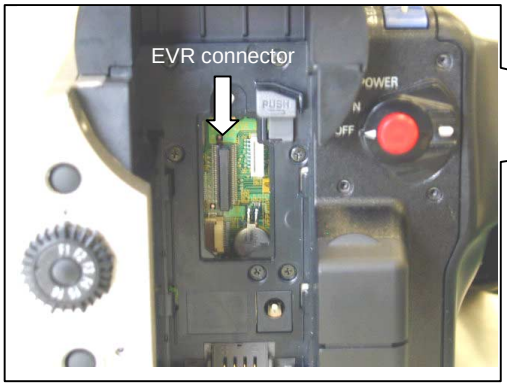
1. Unscrew 1 screw and remove the EVR cover.

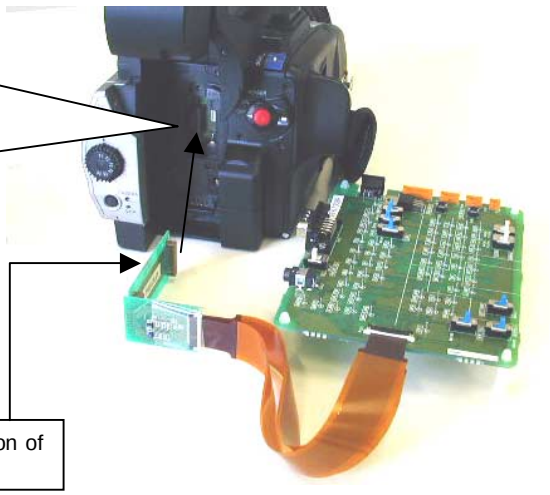


2. Connect the 2 pcs. of 30 pin flat cables(VFK1317) between P101/P102 on the Measuring Board(VFK1308P), and 2 connectors on the EVR Connector Board(VFK1309). Make sure that the contact surface of 2 pcs. of 30 pin Flat Cables are inner side and direction of the EVR Connector Board is as shown in Figure. Then connect the Extender board(VFK1694).



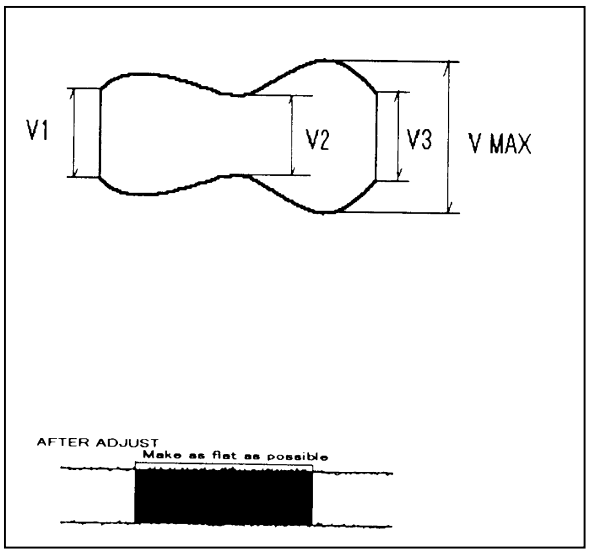
3. Connect the EVR Extender board (VFK1694) to EVR connector on EVR connect C.B.A in AG-DVX100. Then make sure that the direction of the Extender Board is correct as shown in Figure.





When the VFK1694 connect to EVR connector, be careful direction of VFK1694. Please follow as shown in the figure.

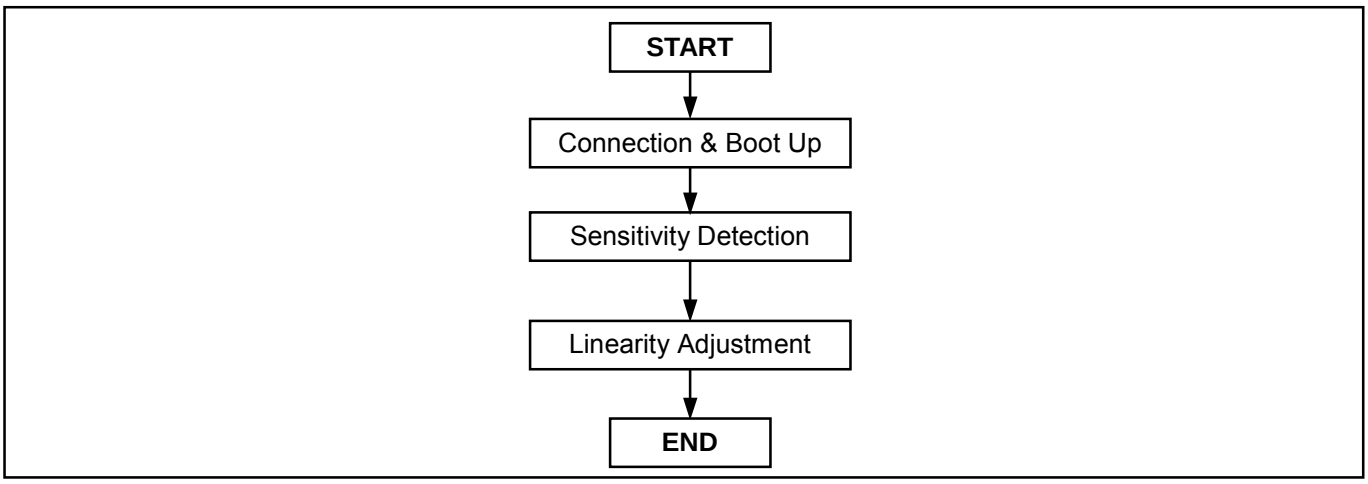
4. Supply DC6V to the Measuring Board (VFK1308P). Please use the DC cable (VJA0941) and AC Adaptor to supply DC voltage to Measuring Board.
5. Connect the oscilloscope to the Measuring Points [ENVELOPE] and [HID] as a trigger on the Measuring Board(VFK1308P).
6. Play back the color bar alignment tape and confirm that the Envelope is within the following specifications.



V1/V max. 0.9
V2/V max. 0.9
V3/V max. 0.9

7. If it is out of the specification, adjust the height of the S1 and T1 Post.

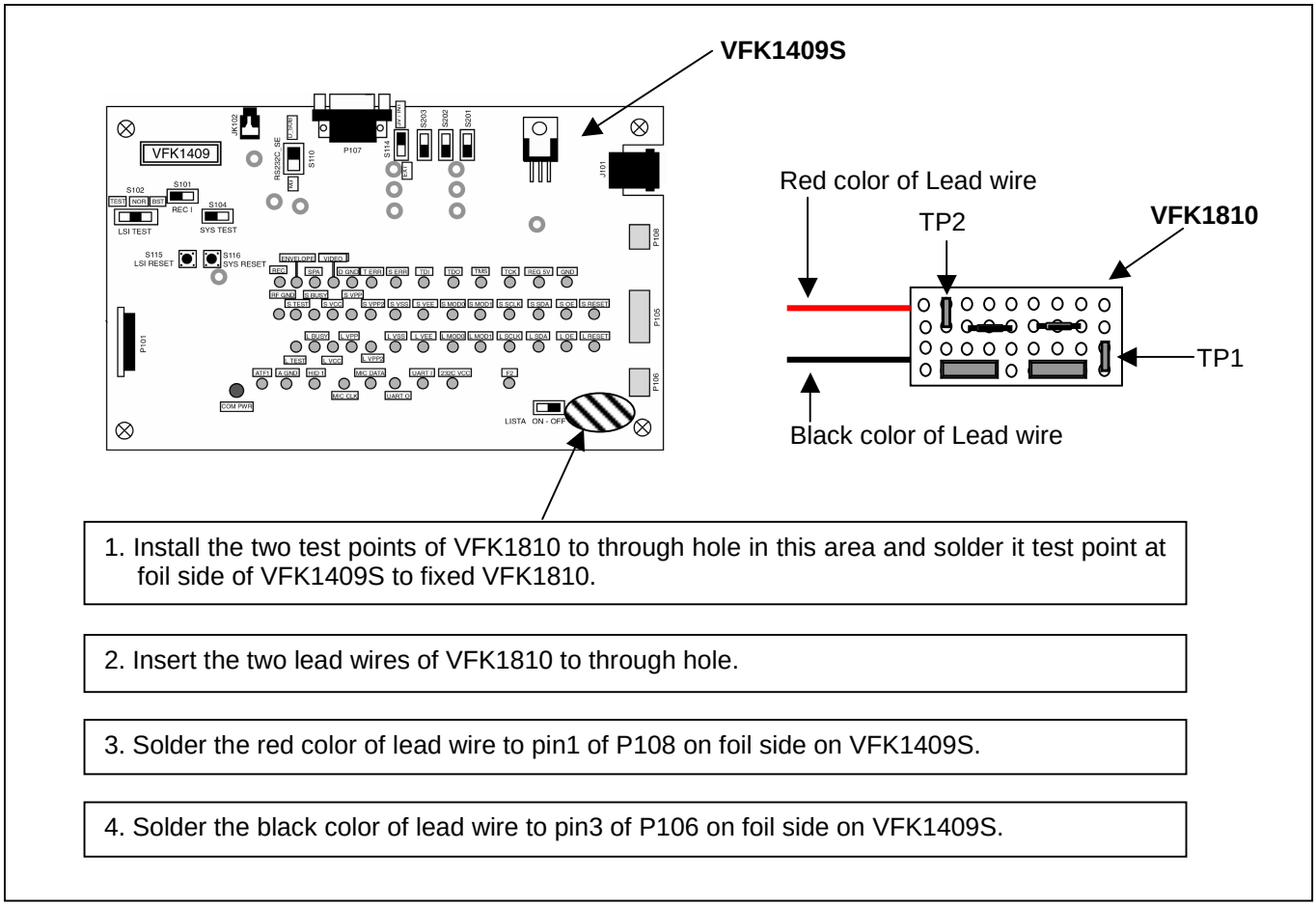
1-6. LISTA Adjustment Procedures



1-6-1. Connection of LISTA Adjustment system

TAPE	VFM3000EDS (DV LISTA)
M. EQ	Personal Computer (A/D Board should be installed.)
TOOL	VFK1481E (LISTA Software), VFK1186 (LISTA Cable), VFK1300 (A/D Converter Board), VFK1308P (Measuring Board), VFK1409A (Measuring Board) ← **NOTE 2** VFK1317 (30P flat cable): 2pcs, VFK1309A (EVR connector board) ← **NOTE 1** VFK1694 (EVR extender board), VJA0941(DC cable): 2pcs, 9P RS232C cross cable.
TP	In case of use VFK1409A **F2** : ATF-ERR (VFK1409A), **TP2** : TRG/HSW (VFK1409A), **GND** : GND (VFK1409A) In case of use VFK1409S **F2** : ATF-ERR (VFK1409S), **TP2** : TRG/HSW (VFK1810), **GND** : GND (VFK1409S)

NOTE 1:
VFK1309 and VFK1309A can be use to perform LISTA adjustment. The VFK1309A is only required LCD adjustment(refer to item 1 of Electrical adjustment procedure in section 4.)
NOTE 2:
If you already have VFK1409S(Measuring board), it can be use to perform LISTA adjustment with VFK1810(LISTA Measuring board).
How to install the VFK1810 to VFK1409S, please refer to next explanation.


VFK1409S
VFK1409
Red color of Lead wire
TP2
VFK1810
TP1
Black color of Lead wire
1. Install the two test points of VFK1810 to through hole in this area and solder it test point at foil side of VFK1409S to fixed VFK1810.
2. Insert the two lead wires of VFK1810 to through hole.
3. Solder the red color of lead wire to pin1 of P108 on foil side on VFK1409S.
4. Solder the black color of lead wire to pin3 of P106 on foil side on VFK1409S.

1. Set the switches on the Measuring Board as shown below.

<VFK1308P>

SW NAME& No.	Setting Position
RS232C SEL(SW101)	D-SUB
VTR TEST(SW103)	L
BST TEST(SW104)	NORMAL
SW105	H
SW106	OFF
SW107	CENTER position
SW108	H
FLUSH1 (SW102)	NORMAL
FLUSH2 (SW109)	NORMAL

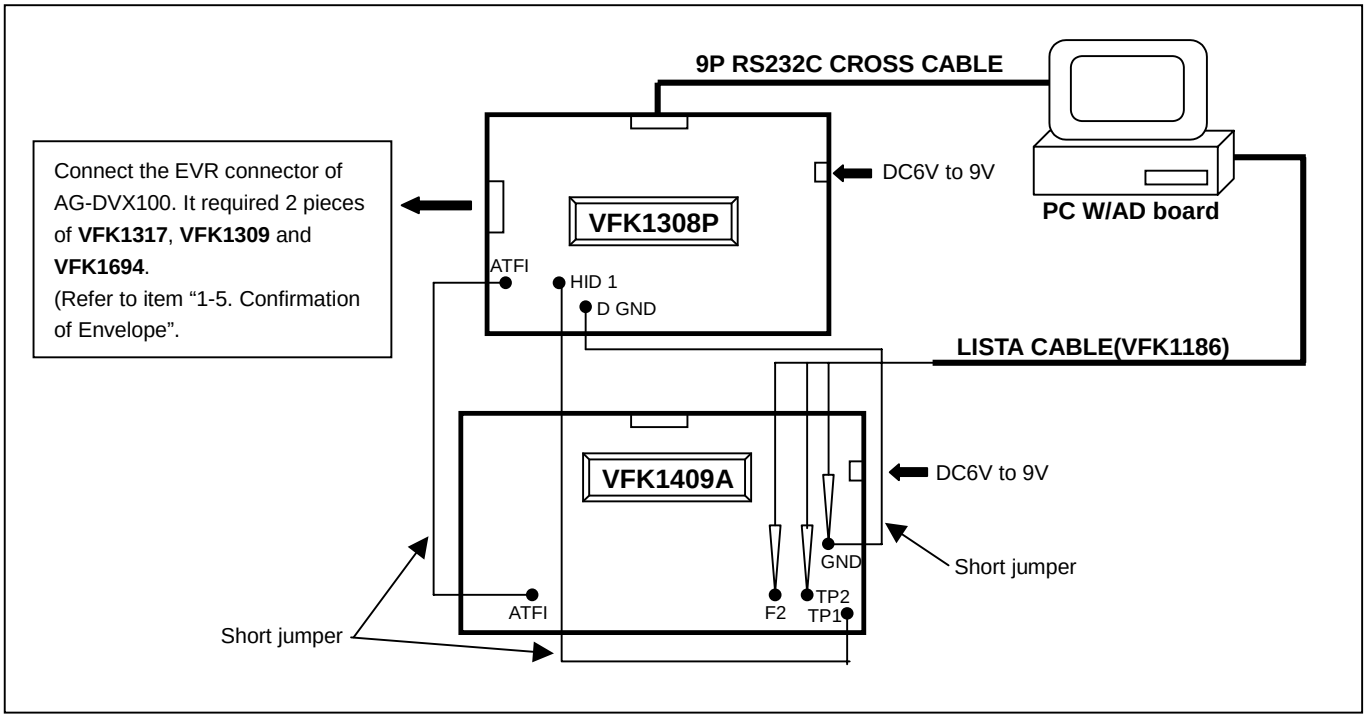
<VFK1409S or VFK1409A>

SW NAME& No.	Setting Position
RS232C SEL (S110)	D-SUB
REC I (S101)	NOR
LSI TEST(S102)	NOR
S104	NOR
S114	EXT
S201	Right side
S202	Right side
S203	Right side
LISTA ON-OFF	ON

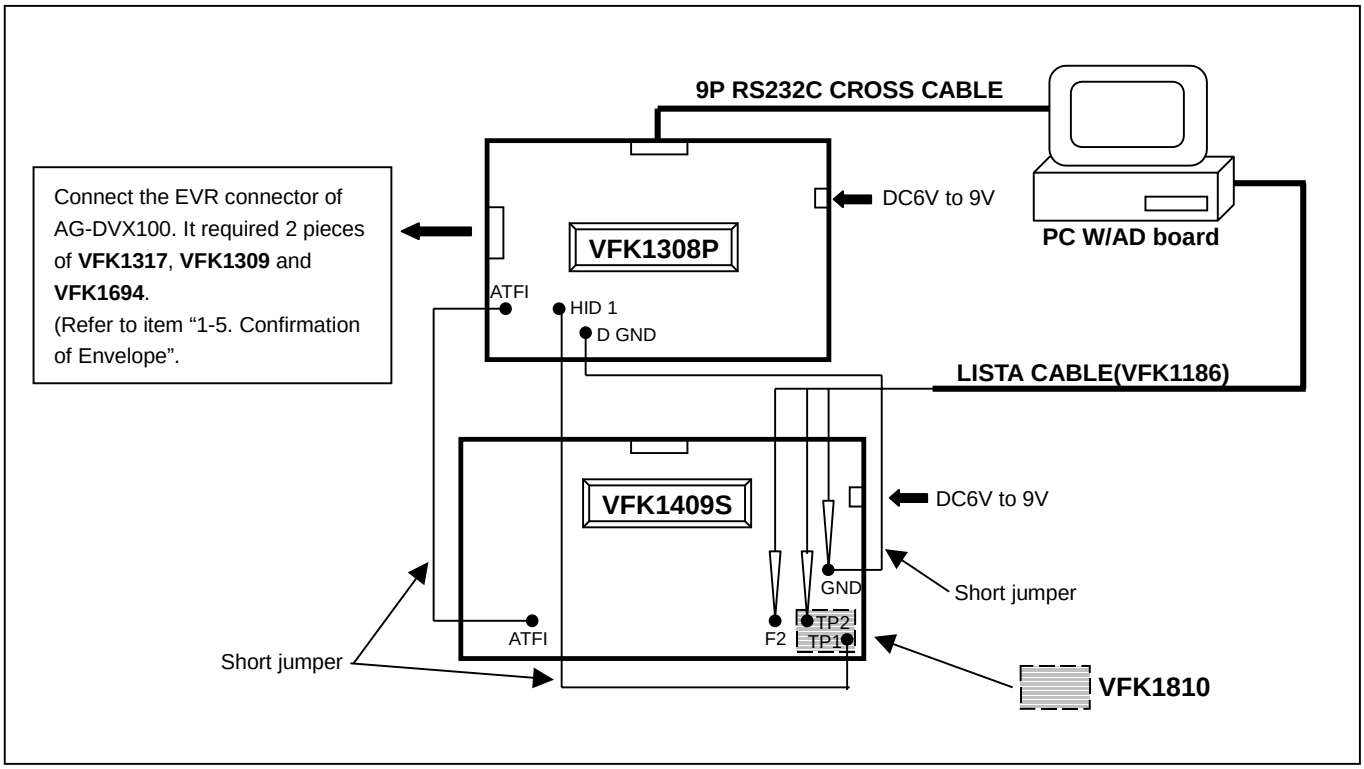
2. Connect a PC, the Measuring Board and the AG-DVX100 as shown below.

<CONNECTION>

1) In case of use VFK1409A



2) In case of use VFK1409S



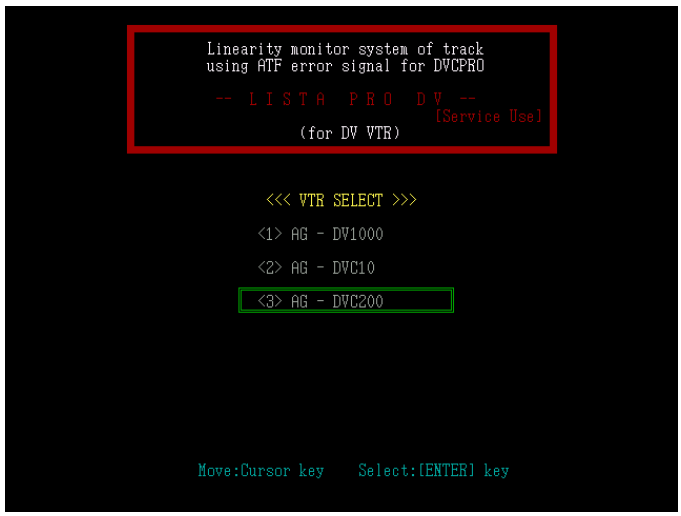
3. Connect the clips of the LISTA cable to test point on the Measuring Board. (Refer to Items **"Sensitivity Detection"** and **"Linearity Adjustment"**.)

1-6-2. Boot up the LISTA software

1. Boot up the LISTA software on DOS mode.

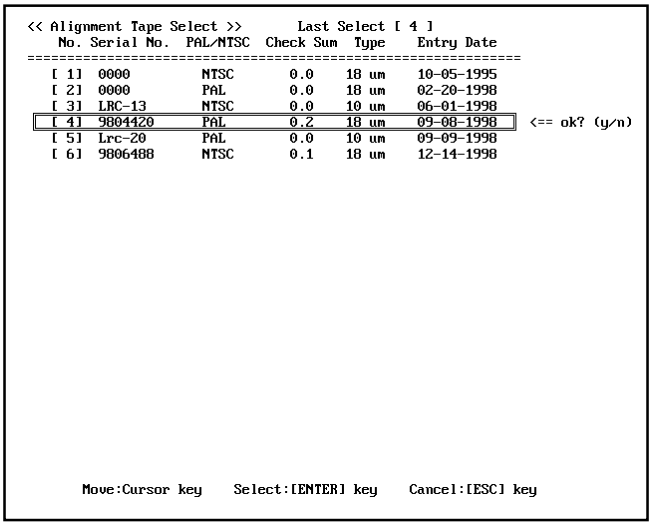
> **< How to Installation and Boot Up >**
> All files on the floppy disk (VFK1481E : LISTA Software) copy to created directly on PC (**i.e.;** C:¥LISTA).
> Type **"LISTA"** and press **ENTER** key, then boot up the LISTA software VFK1481E.

2. After boot up the LISTA software, **<<< FORMAT SELECT >>>** display appeared. Select the item **"DV"**. After select the format, **<<< VTR SELECT >>>** display ppeared, and select the model **"AG-DVC200"**.

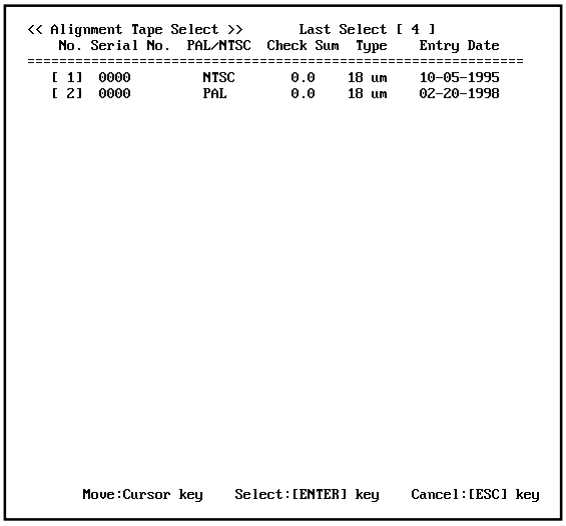


3. Next, select the Serial number of the Alignment tape on the screen. In case of LISTA software have not resisted data of alignment tape, press the ESC key, then main menu is display on the screen. And select the item **"<4> Alignment Tape"** for entry the data on the attachment sheet, which is enclosed of alignment tape.
4. In case of LISTA software have resisted data of alignment tape, select the serial number of Alignment tape, then appear message **"ok?(y/n)"** on the screen. And press **" Y "** or **" ENTER "** key, then LISTA main menu is display on screen.

< In case of Alignment Tape resisted already >



< In case of Alignment Tape does not resisted >



1-6-3. How to Entry the Alignment Tape Data

1. Select the item **"<4> Alignment Tape"** on the LISTA main menu.
2. Select the item **"<2> ENTRY"** on the alignment menu.
3. After display the screen of **<<Alignment Tape Data Entry>>**, first input the Serial Number follow the printed number on the tape label. And input the number **"0"** or **"1"** for selected the PAL/NTSC. And after that for entry the tape type, incase of DVCPRO input to **"0"**, in case of DV input to **"1"**.
4. After select the tape type, the frame for input the DATA and CHECK SUM appeared on the screen. Input the numerical value in numerical order on the data sheet, which are enclosed with alignment tape. If input the wrong number, appear the error message on the screen, then confirm that the data on the sheet.
5. After entry the data, select **"<1> SELECT"** on the Alignment Tape Menu and select the serial number of the alignment tape.

<< Alignment Tape Data Entry >> **Serial No. 0596003 (NTSC) 10μm**

[1]	- 0.1
[2]	0.1
[3]	0.0
[4]	0.2
[5]	0.6
[6]	0.5
[7]	0.7
[8]	0.9
[9]	1.0
[10]	0.8

[11]	0.7
[12]	1.0
[13]	0.7
[14]	0.5
[15]	0.2
[16]	- 0.5
[17]	- 0.3
[18]	- 0.3
[19]	- 0.1
[20]	- 0.6

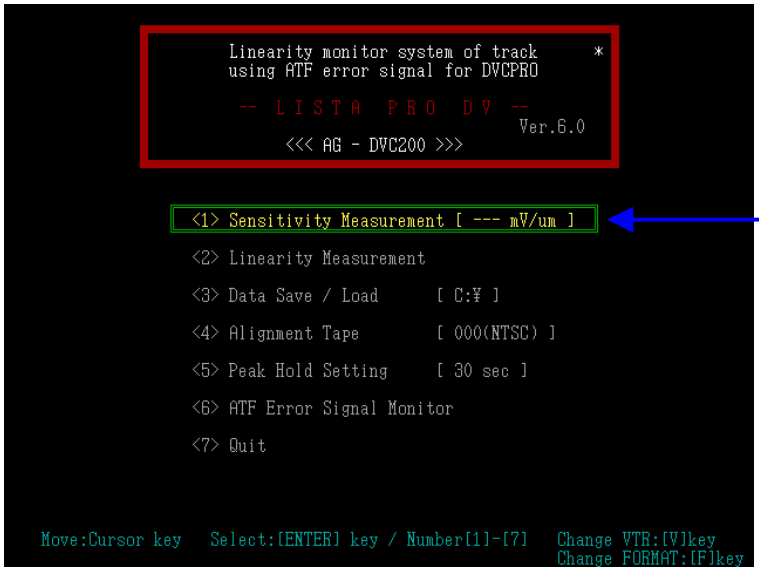
[21]	- 0.4
[22]	- 0.2
[23]	- 0.7
[24]	- 0.6
[25]	- 0.7
[26]	- 0.3
[27]	- 0.4
[28]	- 0.4
[29]	- 0.6
[30]	- 0.3

[31]	- 0.4
[32]	- 0.6
[33]	- 0.3
[34]	- 0.2
[35]	- 0.1
[36]	- 0.3
[37]	- 0.1

[CS]	- 0.6

1-6-4. LISTA Sensitivity Detection

TP	In case of use VFK1409A **F2** : ATF-ERR (VFK1409A), **TP2** : TRG/HSW (VFK1409A), **GND** : GND (VFK1409A) In case of use VFK1409S **F2** : ATF-ERR (VFK1409S), **TP2** : TRG/HSW (VFK1810), **GND** : GND (VFK1409S)
VTR MODE	PLAY
ADJ. MODE	Refer to below explanation
TAPE	VFM3000EDS (DV LISTA)
SPEC.	40 mV / μm to 120 mV / μm


Linearity monitor system of track *
using ATF error signal for DVCPRO
-- LISTA PRO DV --
Ver.6.0
<<< AG - DVC200 >>>
<1> Sensitivity Measurement [--- mV/um]
<2> Linearity Measurement
<3> Data Save / Load [C:¥]
<4> Alignment Tape [000(NTSC)]
<5> Peak Hold Setting [30 sec]
<6> ATF Error Signal Monitor
<7> Quit
Move:Cursor key Select:[ENTER] key / Number[1]-[7] Change VTR:[V]key
Change FORMAT:[F]key

Select at Sensitivity Detection.

1. Set the AG-DVX100 to VCR mode.
2. Insert the DV Alignment Tape (VFM3000EDS) to the AG-DVX100.
3. Press MENU button while pressing ADUB and REW button at the same time, then open the VCR FUNCTION menu.
4. Open the “7. ADJUST MENU” in VCR FUNCTION menu.
5. Select the item “ATF GAIN” and set to ON in ADJUST MENU.
6. Message “NOW SERVO ADJUST PUSH MENU TO RETURN” is appeared on screen.
   Press ► key to playback the tape.
7. Press MENU button to return ADJUST MENU screen.
8. Select item "<1> Sensitivity Measurement " on the LISTA main menu, and press "ENTER".
9. Then the tape is played back (tape speed : 101.2%) automatically, and message “1.2% Speed…” appears an the screen.
10. Press the ENTER key, and then start measurement of the sensitivity value.
11. Confirm that the sensitivity value is with in specification, when the message “<<Sensitivity Measurement Finish>>.

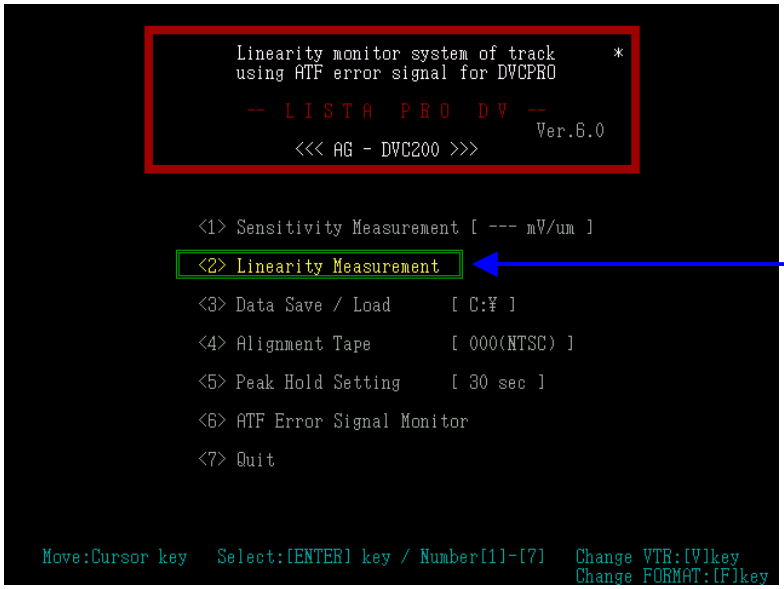
<<Sensitivity Measurement Finish>>

Sensitivity **72.95 (mV/um)**
Sens.1 ~~85.43 (mV/um)~~
Sens.1 85.48 (mV/um)

Confirm that the value of Sens.Value1 and Sens.Value2 in specification

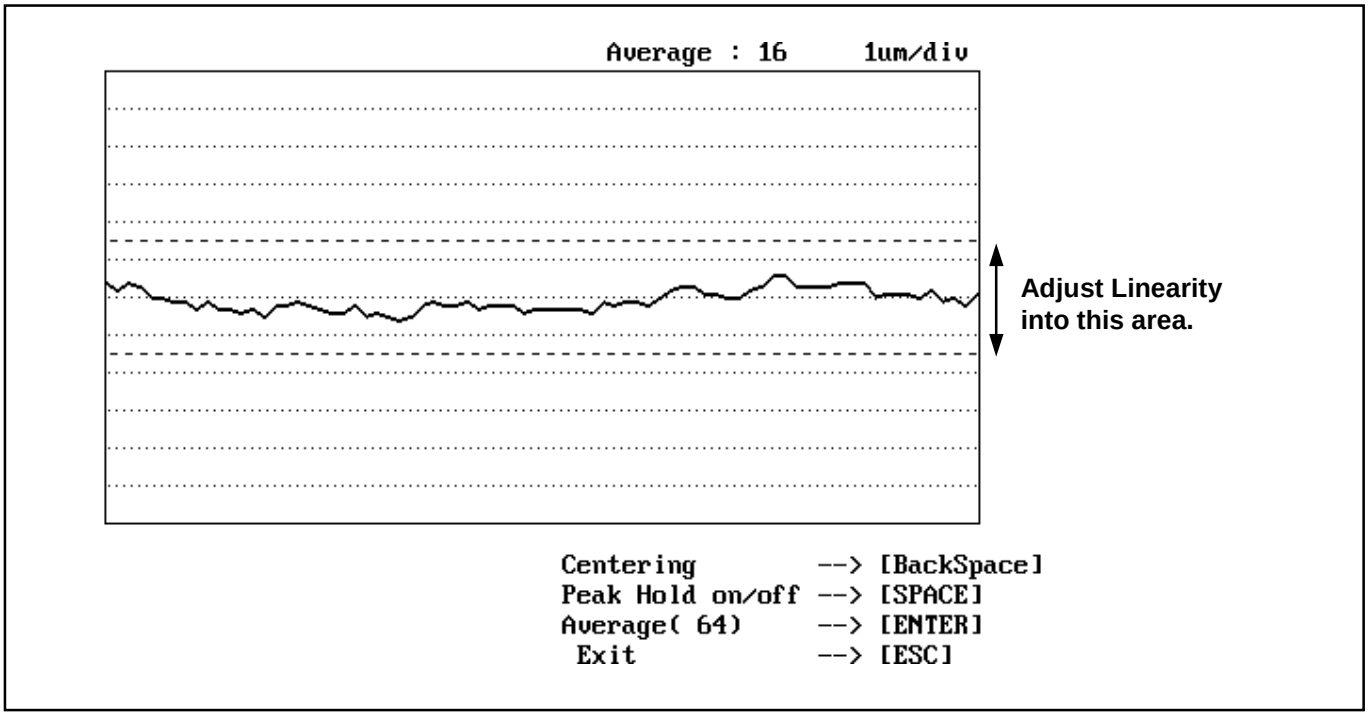
1-6-5. LISTA Linearity Adjustment

TP	In case of use VFK1409A **F2** : ATF-ERR (VFK1409A), **TP2** : TRG/HSW (VFK1409A), **GND** : GND (VFK1409A) In case of use VFK1409S **F2** : ATF-ERR (VFK1409S), **TP2** : TRG/HSW (VFK1810), **GND** : GND (VFK1409S)
ADJ.	S1 and T1 Post Height
VTR MODE	PLAY
ADJ. MODE	Refer to below explanation
TAPE	VFM3000EDS (DV LISTA)
TOOL	VFK1149A : Post Driver
SPEC.	Linearity : less than 3μm


Linearity monitor system of track *
using ATF error signal for DVCPRO
-- LISTA PRO DV --
Ver.6.0
<<< AG - DVC200 >>>
<1> Sensitivity Measurement [--- mV/um]
<2> Linearity Measurement
<3> Data Save / Load [C:¥]
<4> Alignment Tape [000(NTSC)]
<5> Peak Hold Setting [30 sec]
<6> ATF Error Signal Monitor
<7> Quit
Move:Cursor key Select:[ENTER] key / Number[1]-[7] Change VTR:[V]key
Change FORMAT:[F]key

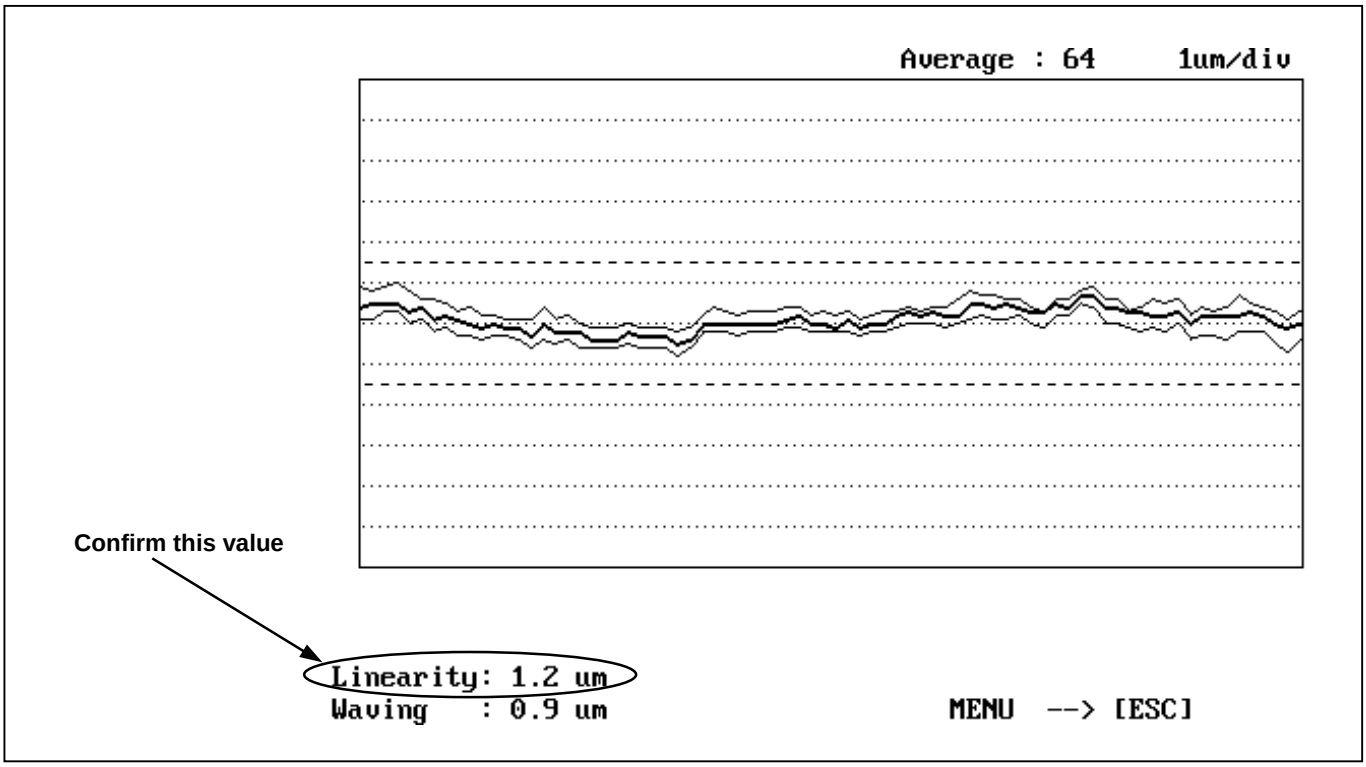
Select at Linearity Measurement.

1. Set the AG-DVX100 to VCR mode.
2. Insert the DV Alignment Tape (VFM3000EDS) to the AG-DVX100.
3. Press MENU button while pressing ADUB and REW button at the same time, then open the VCR FUNCTION menu.
4. Open the “7. ADJUST MENU” in VCR FUNCTION menu.
5. Select the item “LINEARITY” and set to ON in ADJUST MENU.
6. Message “NOW SERVO ADJUST PUSH MENU TO RETURN” is appeared on screen.
   Press ► key to playback the tape.
7. Press MENU button to return ADJUST MENU screen.
8. Select item "<2> Linearity Measurement " on the LISTA main menu, and press "ENTER", then appeared Linearity Waveform.
9. When the waveform as shown below figure is displayed on the screen, press the **”BS (Back Space)”** key for display the waveform positioned at the center of the scale on screen. Adjust S1 and T1 post height by using the post driver so that the linearity waveform is become flat as possible, and it should be within specification. (Adjust linearity waveform in the red dot line on the screen.)



POINT :
The part of left side of waveform (entrance side) is adjusted by height of S1 post and part of right side of waveform (exit side) is adjusted by height of T1 post.
Lower part of above waveform of figure is displayed lead of Cylinder.
When the post driver is remove from upper part of post, linearity waveform is changed.
After finish this adjustment, eject the tape and insert the tape again for confirm the shape of linearity waveform does not changed.

8. Press “SPACE” key to perform the Peak Hold in 30 seconds when linearity is displayed.
9. After finish the Peak Hold, press “SHIFT” and “ } ” key simultaneously on the Key Board, then the numerical values of “Linearity” and “Waving” is displayed on left lower portion of screen. And confirm the numerical value of “Linearity” is in the specification. If the “Linearity” is out of specification adjust height of S1 and T1 post.
10. After this measurement is finished, press the ESC key to return to the main menu.



2. MECHANICAL PARTS REPLACEMENT PROCEDURE

2-1. Disassembly Flowchart

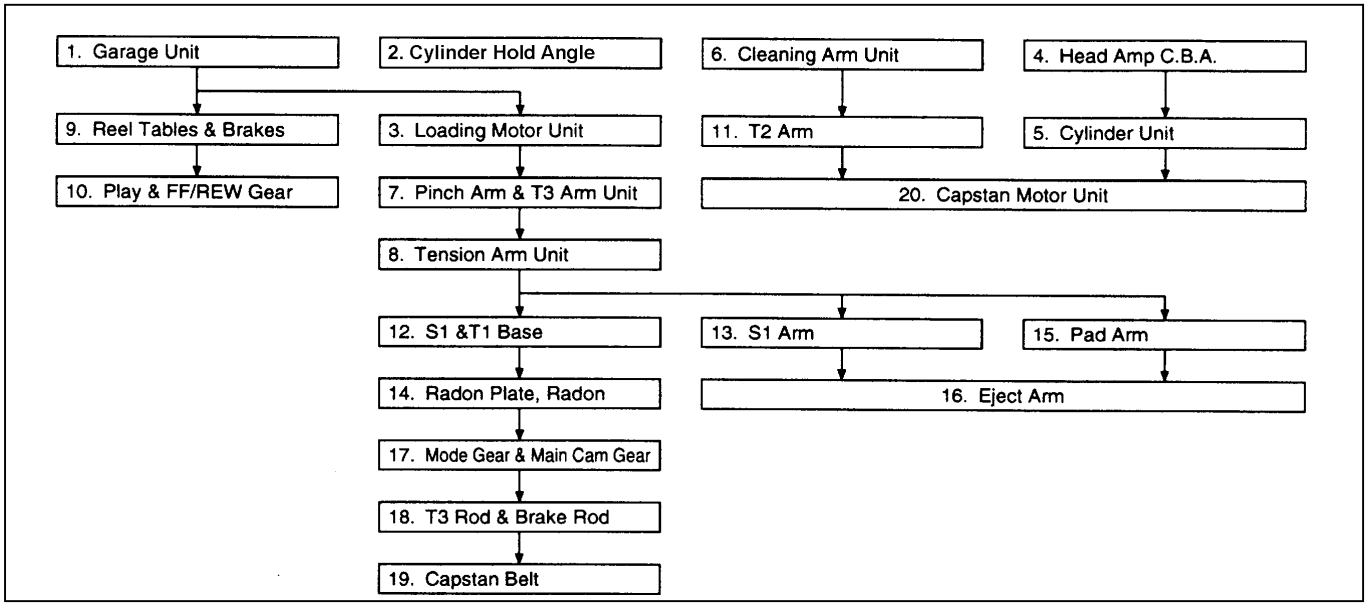

1. Garage Unit
2. Cylinder Hold Angle
6. Cleaning Arm Unit
4. Head Amp C.B.A.
9. Reel Tables & Brakes
3. Loading Motor Unit
11. T2 Arm
5. Cylinder Unit
10. Play & FF/REW Gear
7. Pinch Arm & T3 Arm Unit
20. Capstan Motor Unit
8. Tension Arm Unit
12. S1 &T1 Base
13. S1 Arm
15. Pad Arm
14. Radon Plate, Radon
16. Eject Arm
17. Mode Gear & Main Cam Gear
18. T3 Rod & Brake Rod
19. Capstan Belt

Figure 2-1-1

2-2. Manual Loading / Unloading

For the mechanism maintenance, loading and unloading operation can be manually performed.
In order to perform manual loading and unloading easily, use Gear Driver (VFK1266) as shown in Figure 2-2-1.

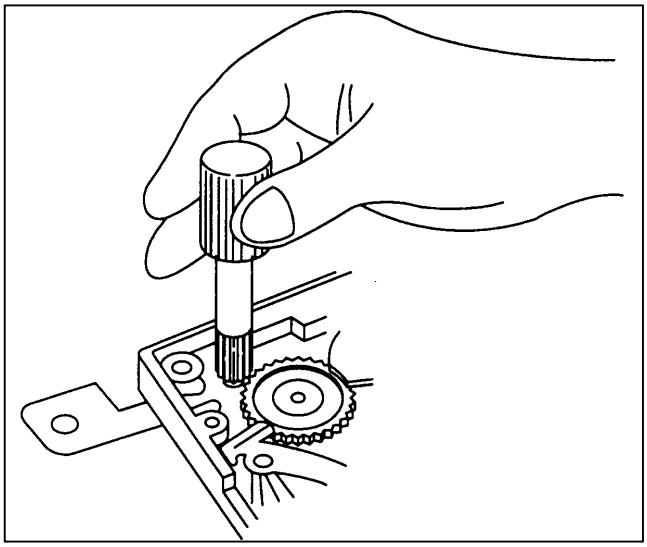


Figure 2-2-1

Rotate the Gear Driver clockwise or counterclockwise so that the Mode Cam Gear rotates opposite direction of the Gear Driver rotation, and then loading and unloading are performed

2-3. Disassembly Procedures

2-3-1. Garage Unit

1. Slide the Lock Lever with tweezers to eject the Garage.

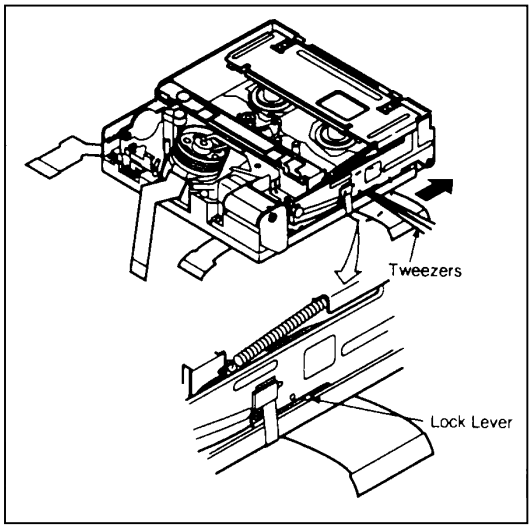


Figure 2-3-1

(Manual Eject)

Unscrew 2 screws (A) and removes Supply and Take-up Photo Transistors from Garage Unit. Unscrew 4 screws (B) and remove the Garage Unit.

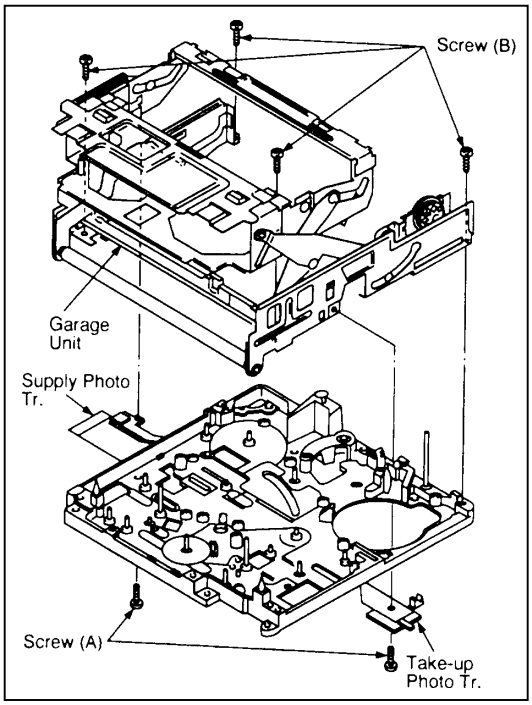


Figure 2-3-2

2-3-2. Cylinder Hold Angle

1. Unscrew 2 screws (C) and remove the Earth Brush.

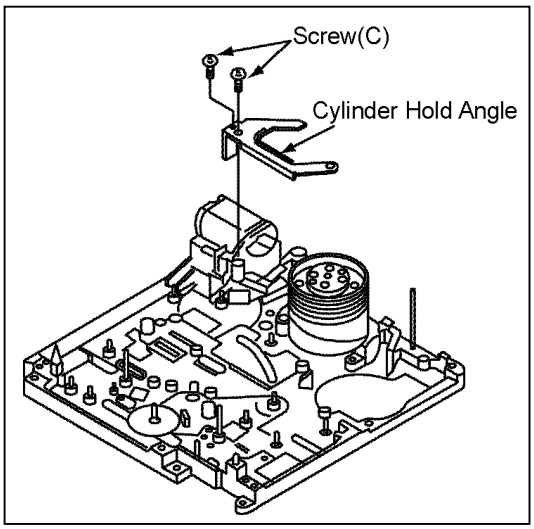


Figure 2-3-3

(Note of installation)

Install the Cylinder Hold Angle so that the tip of Angle is located in the P.C.Board.

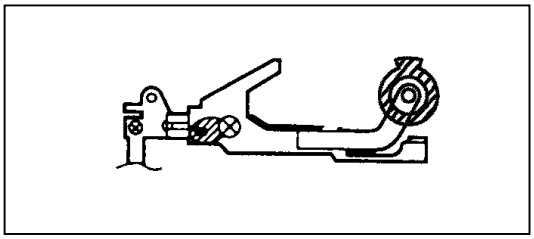


Figure 2-3-4

2-3-3. Loading Motor Unit

1. Unsolder the soldered portion (D). Unscrew 2 screws (E) and remove the Loading Motor Unit.

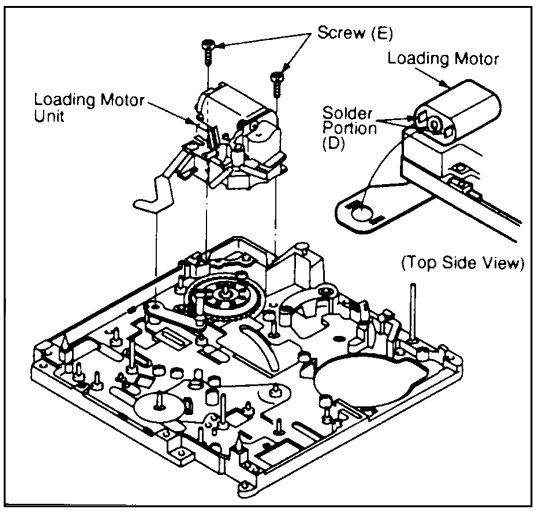


Figure 2-3-5

2-3-4. Head Amp C.B.A.

1 Unscrew screw (F) and remove the Capstan Cover. Disconnect FP5001.Disconnect Unscrew 2 screws (G) and remove the Head Amp C.B.A.

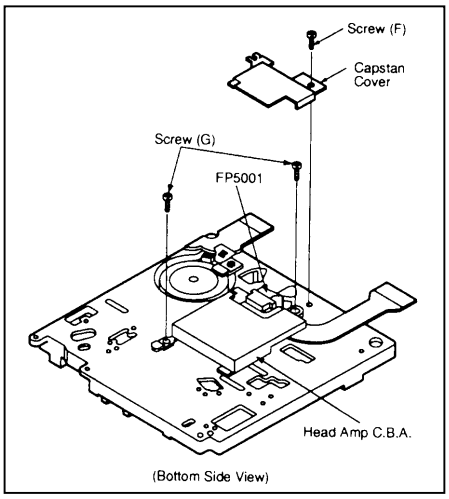


Figure 2-3-6

2-3-5. Cylinder Unit

1. Unscrew 3 screws (H) and remove the Cylinder Unit carefully. Do not touch the Video Head.

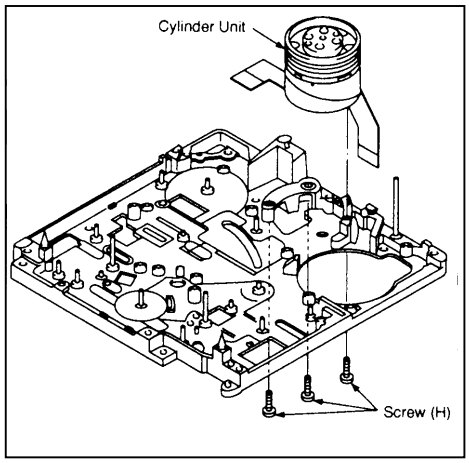


Figure 2-3-7

2-3-6. Cleaning Arm Unit

1. Unlock the locking portion of the Cleaning Arm Unit

(Note of installation)

Hooking portion of the Cleaning Arm Spring is;
Spring (a) -- Cleaning Arm spring (a')
Spring (b) -- T2 Arm Unit (b')

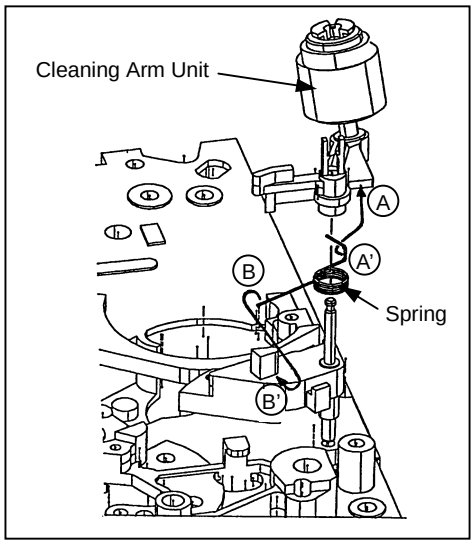


Figure 2-3-8

2-3-7. Pinch Arm & unlock T3

1. Unscrew screw (I), then slide the Pinch Pressure Plate and unlock the locking portion.

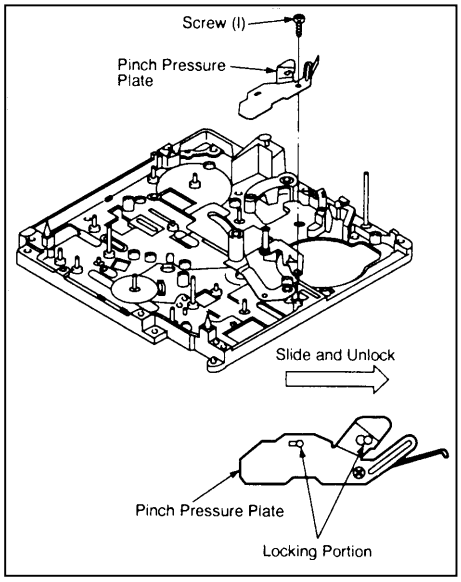


Figure 2-3-9

(Note of installation)
Remove the T3 Arm Unit.
After install T3 Arm Unit, the Height Adjustment is required.

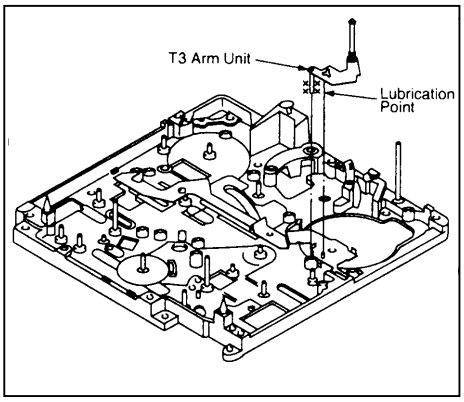


Figure 2-3-10

(Note of installation)
Remove the Pinch Arm Unit and Pinch Arm Spring.

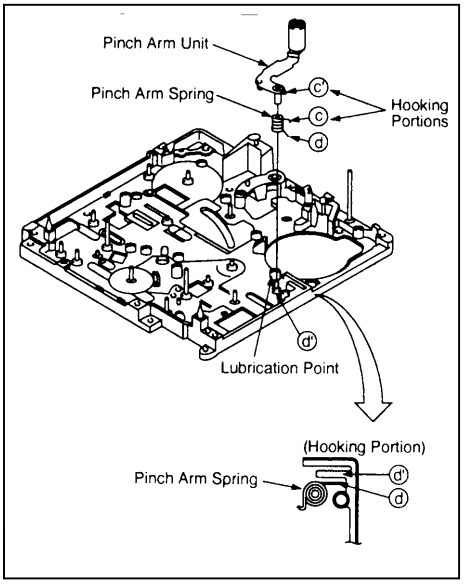


Figure 2-3-11

(Note of installation)
Hooking portion of the Pinch Arm Spring is;
Spring (c) -- Pinch Arm (c')
Spring (d) -- T3 Rod (d')

2-3-8. Tension Arm Unit

1. Turn the Mode Gear counter-clockwise until Tension Arm Unit slightly move to loading direction. Remove the Tension Arm Unit and Cut Washer (J).

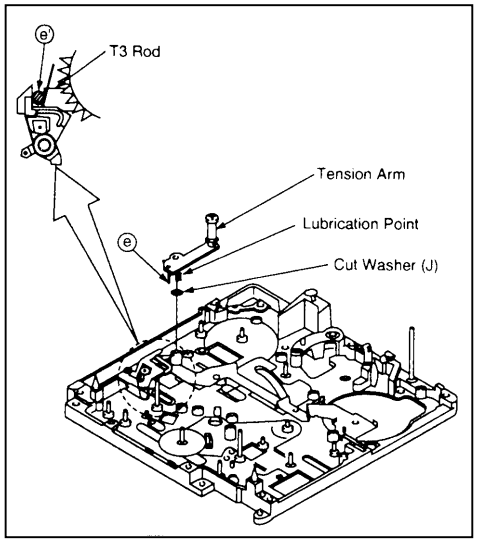


Figure 2-3-12

(Note of installation)
The projection (e) on Tension Arm meets guide (e') on the T3 Rod which is shifted by turning Mode Gear.

2-3-9. Reel Tables & Brakes

1. Unhook the hooking portion (f) and (f'). Unscrew 3 screws (K) and remove Cover Plate.

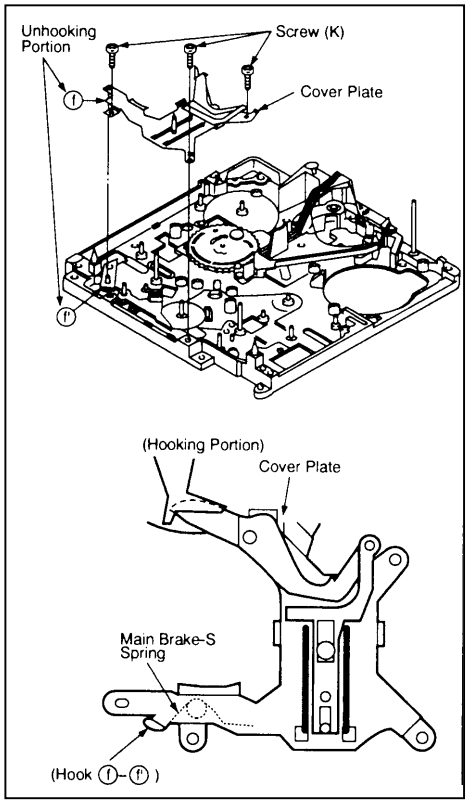


Figure 2-3-13

2. Remove Supply and Take-up Reel Tables.

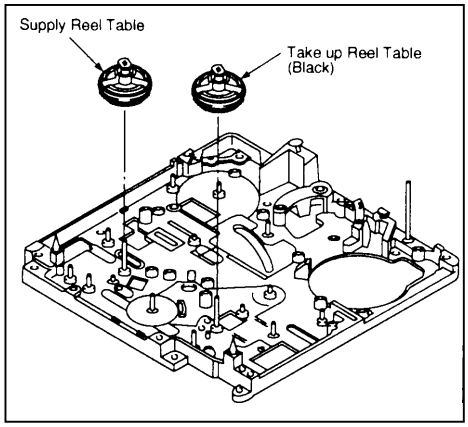


Figure 2-3-14

3. Unhook the hooking portion (g) and (g') of the Review Brake Spring and remove Review Brake.

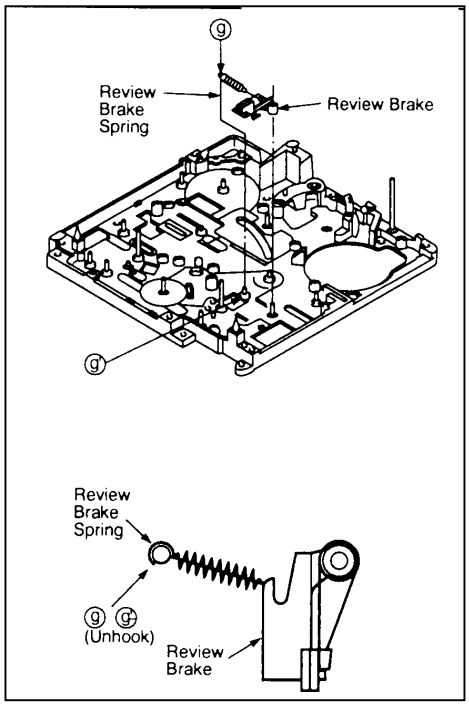


Figure 2-3-15

4. Remove the FF Brake and FF Brake Spring.

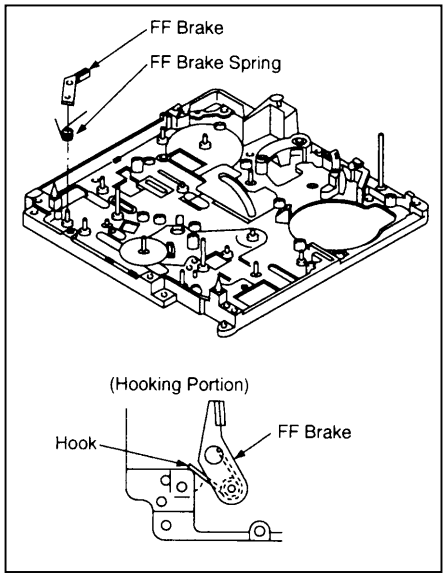


Figure 2-3-16

(Note of installation)
Confirm the hooking portion of the FF Brake Spring.

5. Remove the Main Brake S and Main Brake-S Spring.

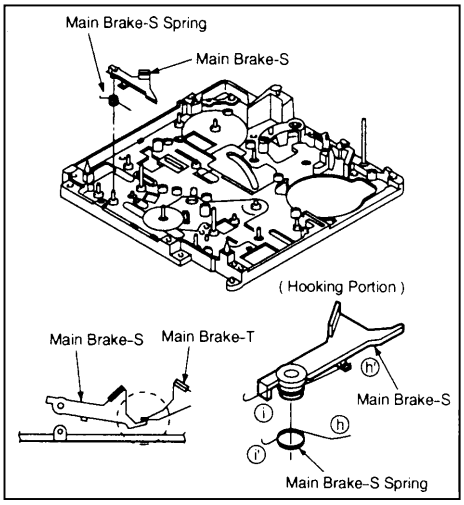


Figure 2-3-17

(Note of installation)
Confirm the hooking portion of the Main Brake-S Spring.

6. Remove the Cut Washer (L) and Main Brake T Unit.

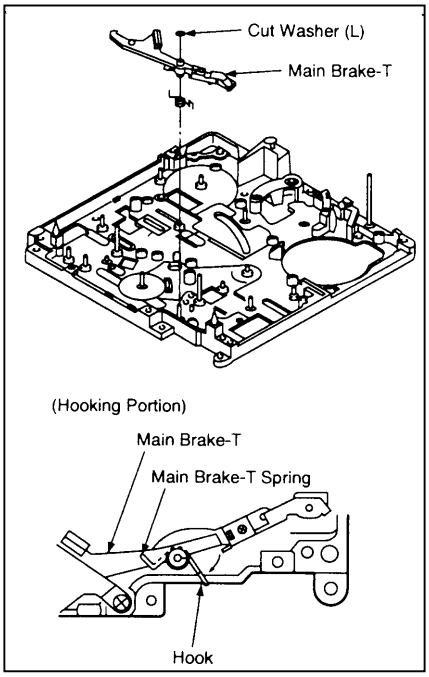


Figure 2-3-18

(Note of installation)
Confirm the hooking portion of the Main Brake T Spring.

2-3-10. Play & FF/REW Gear

1. Remove the Play Idler and Play Gear.

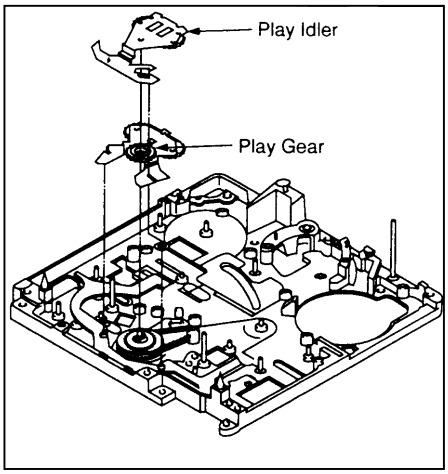


Figure 2-3-19

2-3-11. T2 Arm Unit

1. Remove the Cut Washer (M) and T2 Arm Unit with spring.

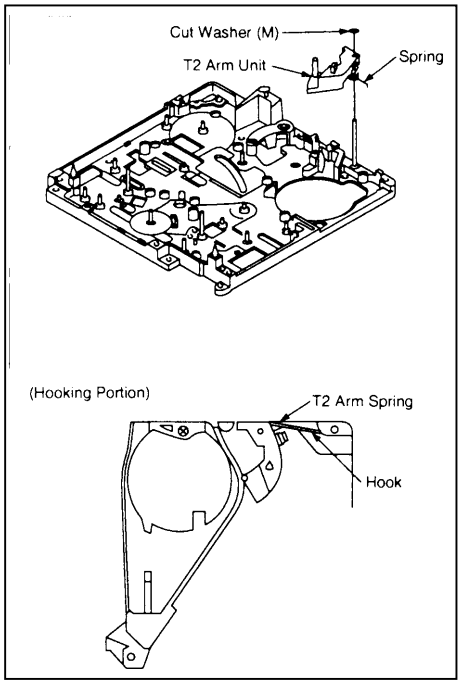


Figure 2-3-20

(Note of installation)
Confirm the hooking portion of the T2 Arm Spring.

2-3-12. S1 & T1 Base

1. Turn the Mode Gear counter-clockwise until half loading position. Hold (N) and (O) positions on S1 and T1 Arm units and then unlock the locking portions (A) and (B) with tweezers.

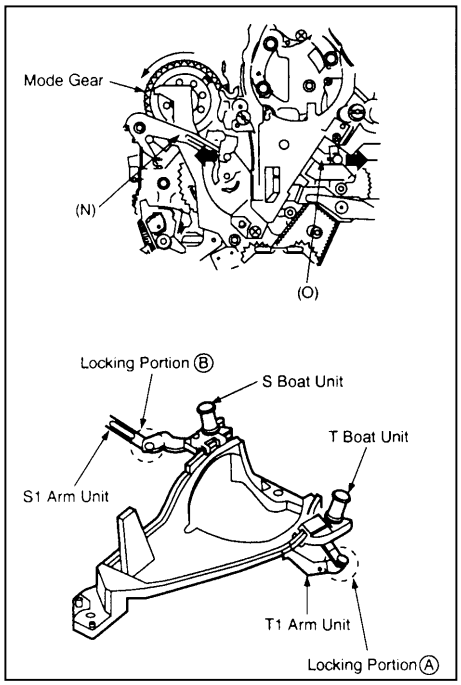


Figure 2-3-21

2. Remove 2 screws (P) and Cylinder Base Unit with S and T Boat Units. Then remove S and T Boat Units from the Cylinder Base Unit.

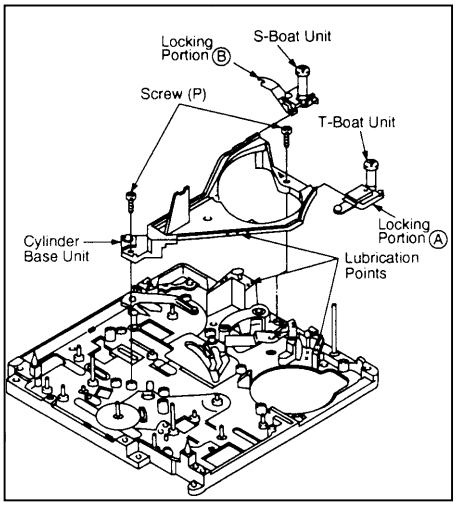


Figure 2-3-22

(Note of installation)
After install the Cylinder Base Unit move, S and T Boat to loading completed position by finger and turn the Mode Gear clockwise until half loading position. Then connect the locking portion (A) and (B).

2-3-13. S1 Arm

1. Turn the Mode Gear fully counter-clockwise. Remove the Cut Washer (Q) and S1 Arm Unit.

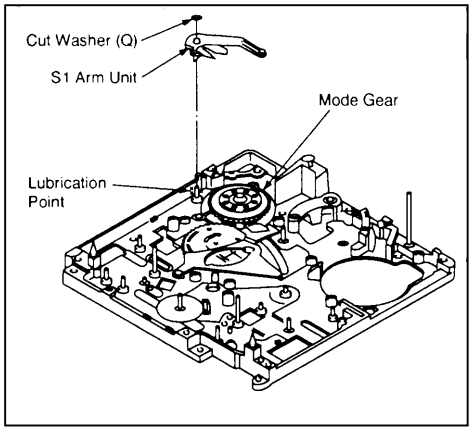


Figure 2-3-23

2-3-14. Radon Plate, Radon Arm & T1 Arm

1. Unscrew 2 screws (R) and remove Radon Plate.

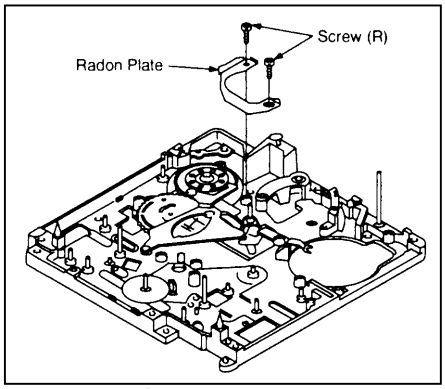


Figure 2-3-24

2. Unscrew screw (S) and remove Radon Arm Unit.

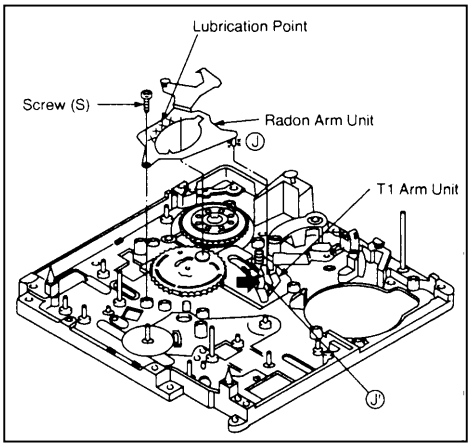


Figure 2-3-25

(Note of installation)
When installing the T1 Arm Unit, the projection (j) on the Radon Arm Unit is aligned to guide (j') on the T1 Arm Unit by pushing the T1 Arm Unit.

3. Remove the T1 Arm Unit.

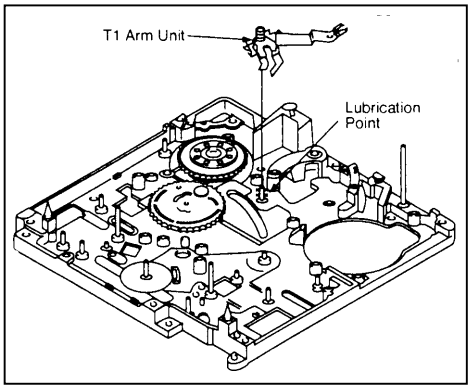


Figure 2-3-26

2-3-15. Pad Arm

1. Unhook the hooking portion (k') of the Pad Arm Spring. Remove the Cut Washer (T) and Pad Arm Unit.

(Note of installation)
Confirm the hooking portion of the Pad Arm Spring(k..k').

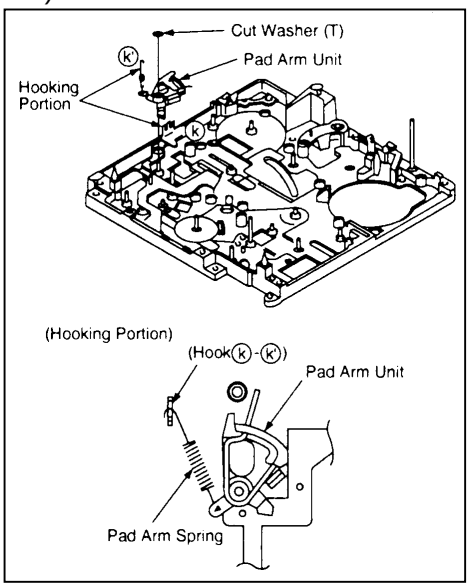


Figure 2-3-27

2-3-16. Eject Arm

1. Unscrew 2 screws(U) and remove the Eject Arm Unit.

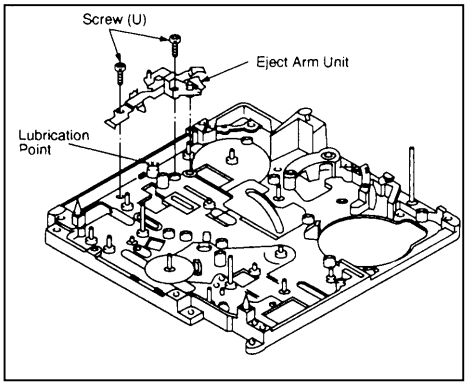


Figure 2-3-28

2-3-17. Mode Gear & Main Cam Gear

1. Remove the Main Cam Gear. Unsolder the soldered portion (l) on the Mechanism Flexible Board. Then remove the Mode Gear.

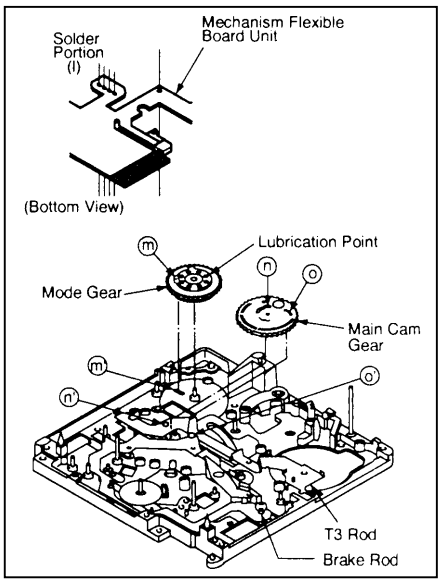


Figure 2-3-29

(Note of installation)
The projection (m) on the Mode Gear meets with the hole (m') on the Mechanism Chassis.
Push the Brake and T3 Rod in fully left direction.

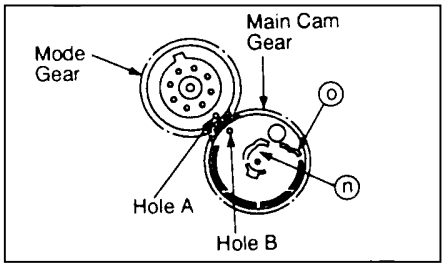


Figure 2-3-30

Install the Main Cam Gear so that the hole A on the Mode Gear is aligned to meet with the hole B on the Main Cam Gear.

Shift the T3 Rod slowly in the right direction until guide (n) on the Main Cam Gear meets with the projection (n') on the T3 Rod.
Shift the Brake Rod slowly in the right direction until guide (o) on the Main Cam Gear meets with the projection (o')on the brake Rod.

2-3-18. T3 Rod & Brake Rod

1. Remove the T3 Rod. The projection (p) and (q) on the T3 Rod meet with the guide (p') and (q') on the Mechanism Chassis.

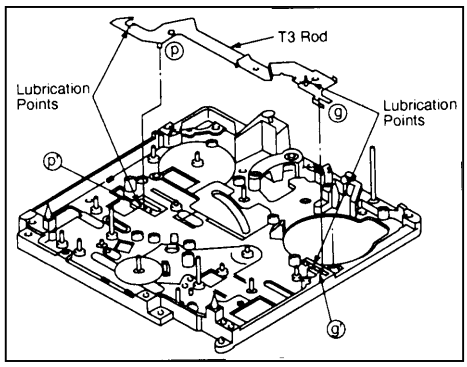


Figure 2-3-31

2. Unscrew 2 screws (V) and remove the Brake Rod, Brake Rod Plate A and B.

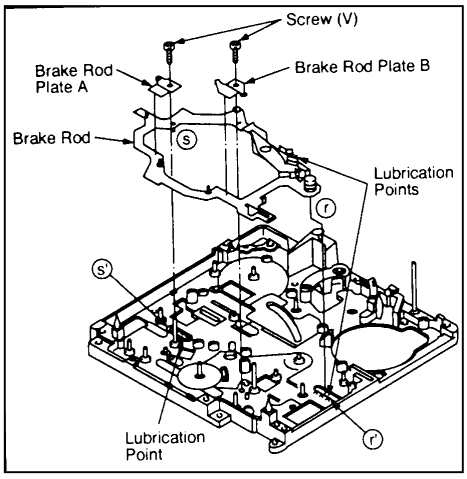


Figure 2-3-32

(Note of installation)
The projection (r) and (s) on the Brake Rod meet with the guide (r') and (s') on the Mechanism Chassis.

2-3-19. Capstan Belt

1. Remove the Center Gear and Washer (W). Unscrew screw (X) and remove LED Holder. Remove Cut Washer (Y).

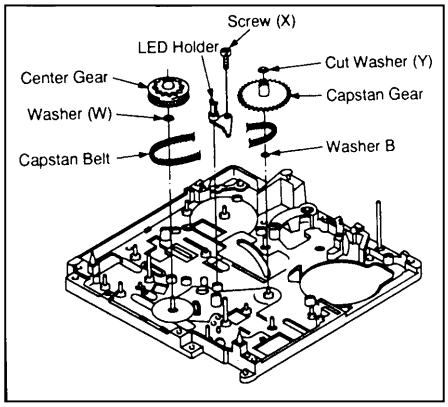


Figure 2-3-33

(Loosen a black screw on the Cap. Motor as shown in Fig.) Slightly lift up in the direction and slowly remove the Capstan Gear. Do not bend the Capstan Shaft.

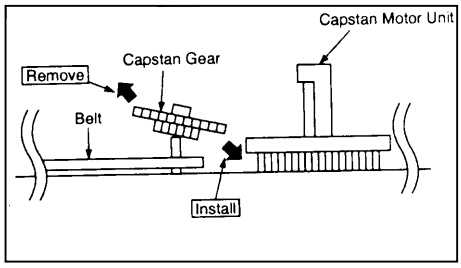


Figure 2-3-34

2. Remove the Capstan Belt.

(Note of installation)
After install Capstan Gear, confirm no warp of the Capstan Gear, no bend of the Capstan Gear Shaft and smooth rotation of the Capstan and Center Gear.

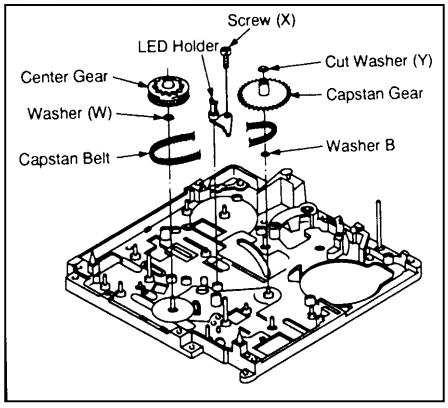
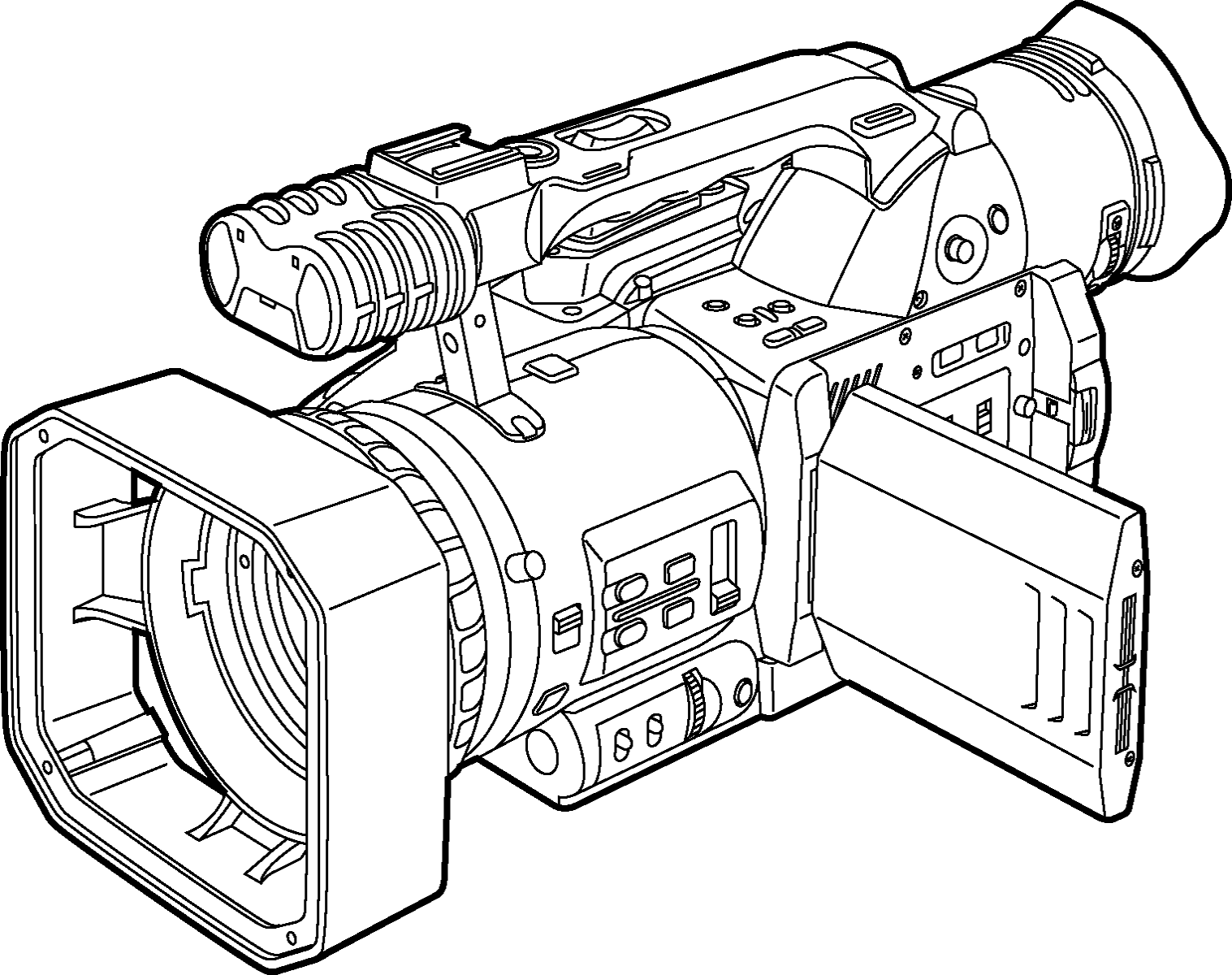


Figure 2-3-35

Panasonic®



IMPORTANT

"Unauthorized recording of copyrighted television programs, video tapes and other materials may infringe the right of copyright owners and be contrary to copyright laws."

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER TO SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (service) instructions in the literature accompanying the appliance.

WARNING:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, KEEP THIS EQUIPMENT AWAY FROM ALL LIQUIDS-USE AND STORE ONLY IN LOCATIONS WHICH ARE NOT EXPOSED TO THE RISK OF DRIPPING OR SPLASHING LIQUIDS, AND DO NOT PLACE ANY LIQUID CONTAINERS ON TOP OF THE EQUIPMENT.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

CAUTION:

Do not install or place this unit in a bookcase, built-in cabinet or any other confined space in order to maintain adequate ventilation. Ensure that curtains and any other materials do not obstruct the ventilation to prevent risk of electric shock or fire hazard due to overheating.

FCC Note:

This device complies with Part 15 of the FCC Rules. To assure continued compliance follow the attached installation instructions and do not make any unauthorized modifications.

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION:

Danger of explosion or fire if battery is mistreated.

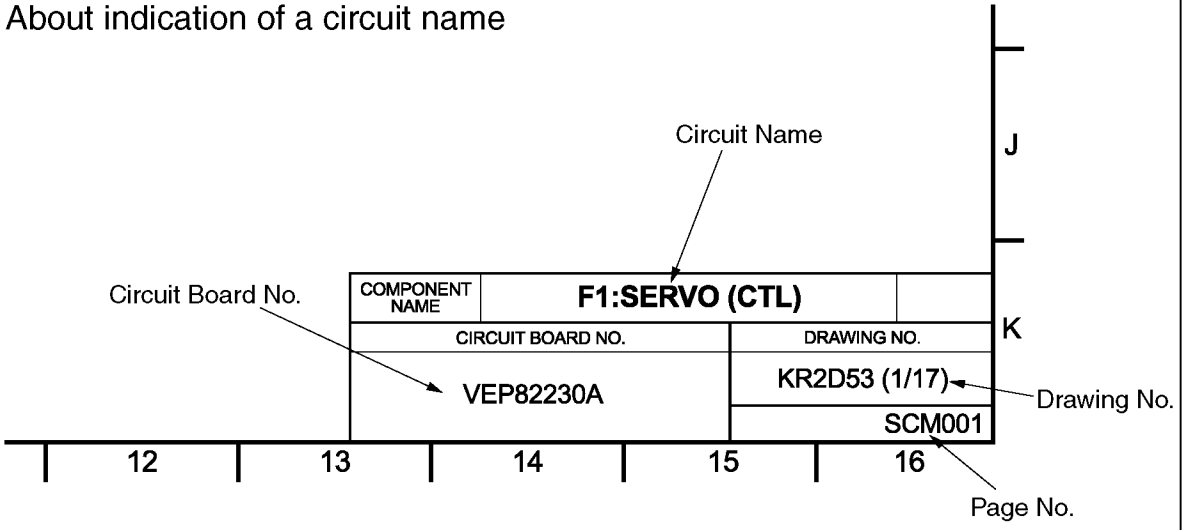
- Replace only with same or specified type.
- Do not disassemble or dispose of in fire.
- Do not store in temperatures over 60°C.
- Use specified charger for rechargeable batteries.
- Do not recharge the battery if it is not a rechargeable type.

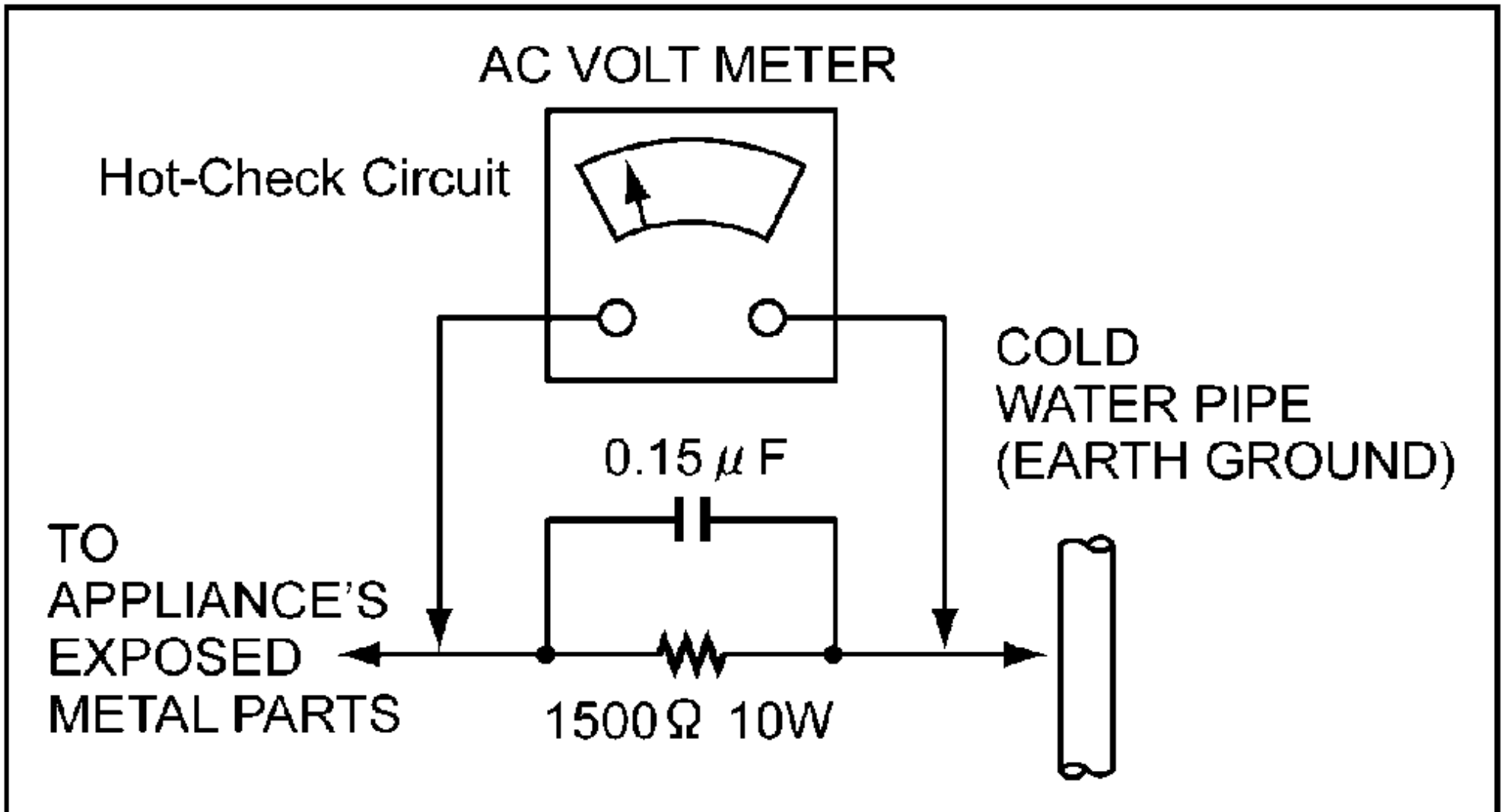
For Remote Controller

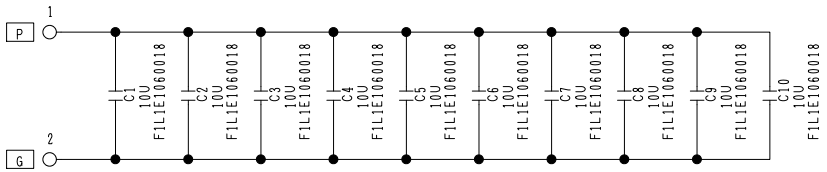
- Replace battery with part No. CR2025 only.
- Do not recharge the battery.

indicates safety information.

About indication of a circuit name




AC VOLT METER
Hot-Check Circuit
COLD
WATER PIPE
(EARTH GROUND)
0.15 μF
TO
APPLIANCE'S
EXPOSED
METAL PARTS
1500 Ω 10W



COMPONENT NAME	VTR_SUB	01/01
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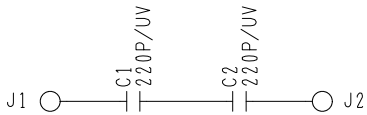
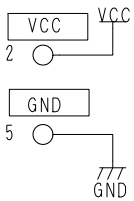
	SCM044	

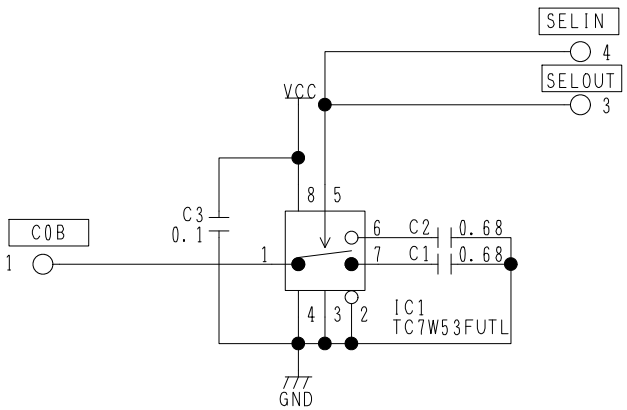


NOTE
(*1):KISHU KIRIKAE SANSHOU

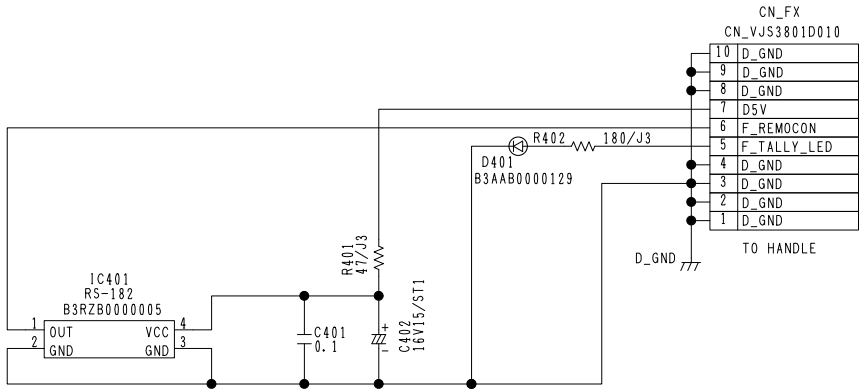
PAT=PATTERN ONLY
Ref No. 1-49 Series.

COMPONENT NAME	POWER SUB	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP001A6A	KR0T47 (1/1) (0)	
	SCM044	





COMPONENT NAME	CAMERA SUB	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP001A7A	KR0T48 (1/1) (0)	
	SCM044	

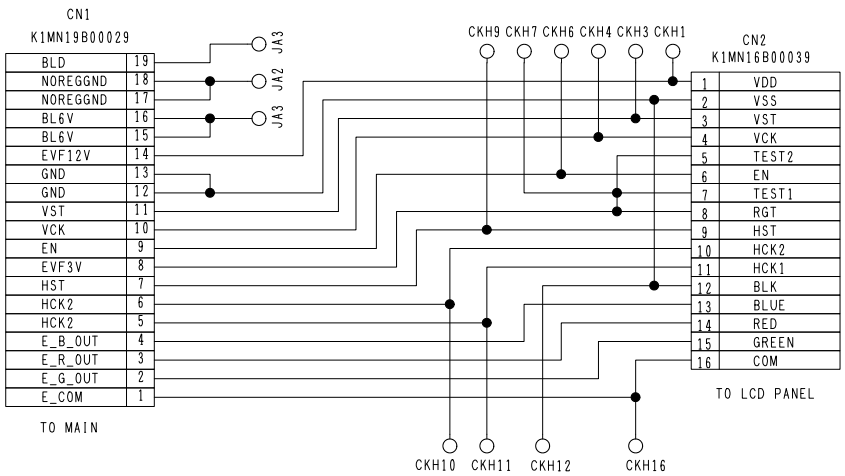


Ref No. 400-450 Series.

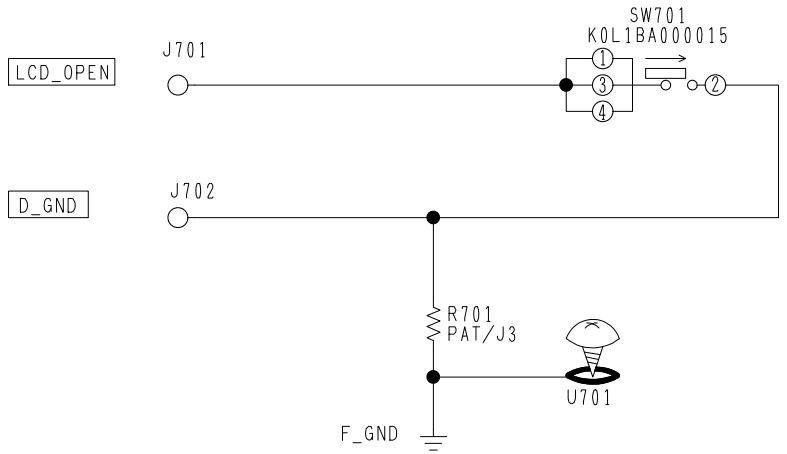
COMPONENT NAME	F_TALLY	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP06E94A	KR6V45 (1/1) (0)	
	SCM044	

A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

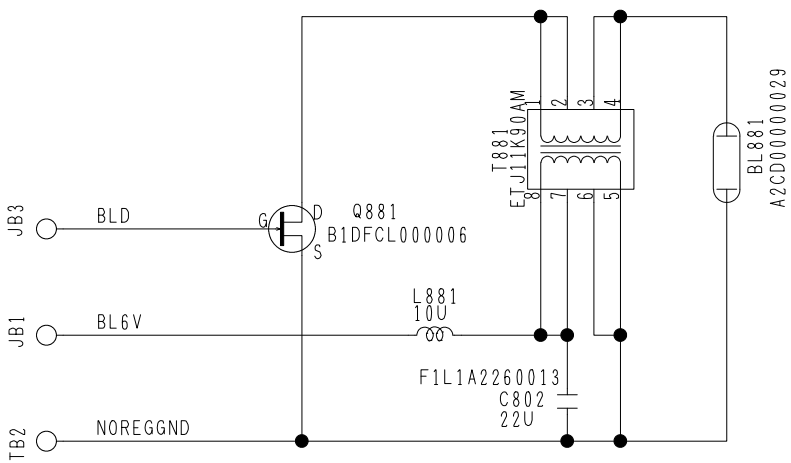


COMPONENT NAME	EVF_A	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP28272B	KR8840 (1/1) (0)	
	SCM045	

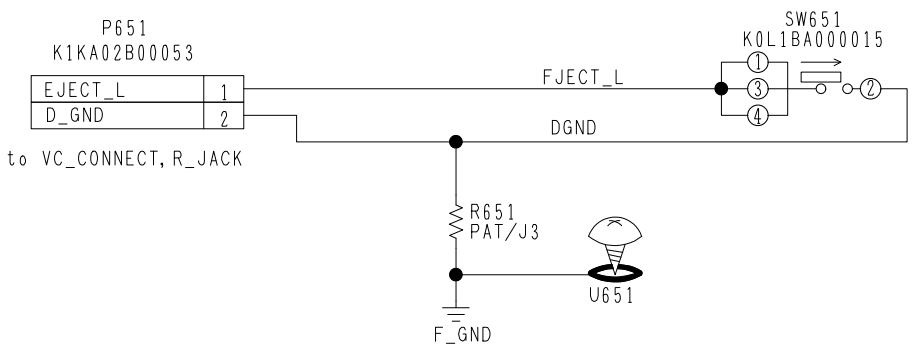


Ref No. 701-709 Series.

COMPONENT NAME	LCD_OPEN_SW	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Y4A	KR0S20 (1/1) (0)	
	SCM045	



COMPONENT NAME	EVF_B	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP28275B	KR8841 (1/1) (0)	
	SCM045	

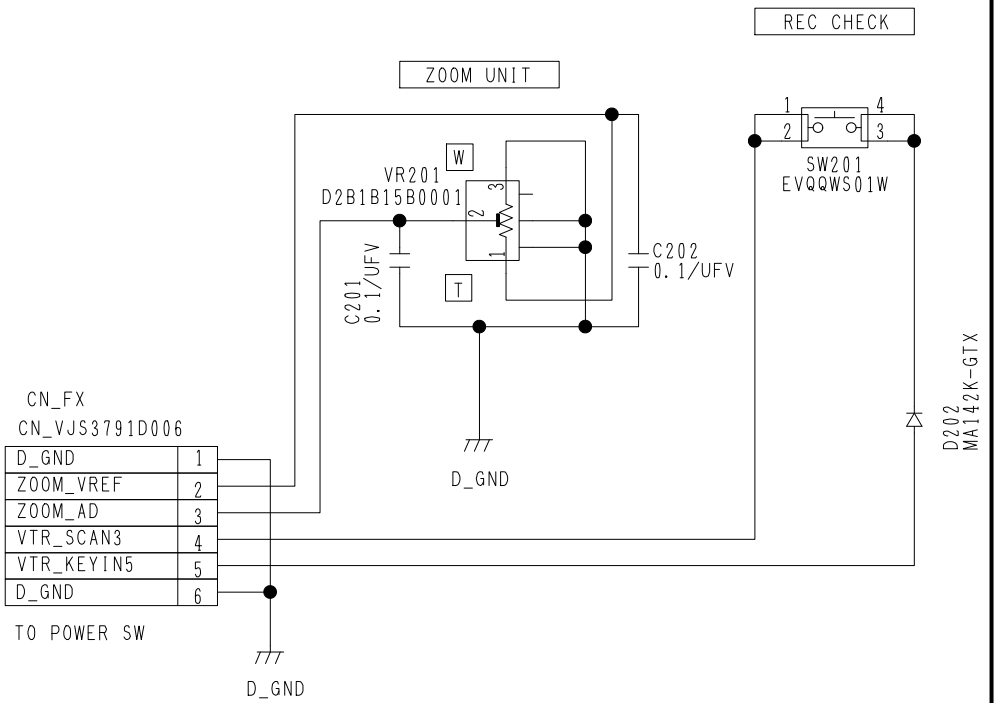


Ref No. 651-699 Series.

COMPONENT NAME	EJECT	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Y7A	KR0S34 (1/1) (0)	
	SCM045	

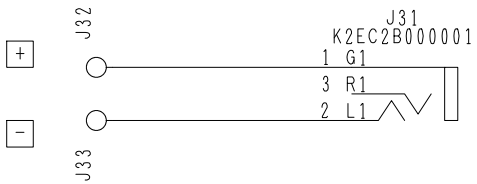
A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



Ref No. 201-250 Series.

COMPONENT NAME	ZOOM SW	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP06E90A	KR6V41 (1/1) (0)	
	SCM046	



Ref No. 31-49 Series

COMPONENT NAME	DC_IN	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP01923A	KR1F95 (1/1) (0)	
	SCM046	

A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

SECTION 1

SERVICE INFORMATION

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1. SERVICING FIXTURES AND TOOLS

The following servicing tools are required for mechanical and electrical servicing and alignment.
The items marked **"NEW"** in the following list are necessary for the AG-DVX100.
Please refer to **"Y"** in table below, these tools were also used for servicing the AG-DVC15.

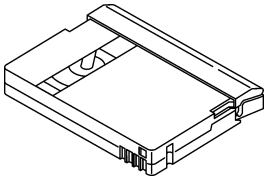
1-1. Summary Table of Servicing Fixtures and Tools

No.	Parts No.	NAME	AG-DVC15	PURPOSE	REMARK
1	VFM3010EDS	DV Alignment Tape (Color bar)	Y	Electrical Adjustment	
2	VFM3000EDS	DV Alignment Tape (Linearity)	Y	Tape Interchangeability Adjustment	
3	VFK1217	Tape End/Beg Detect Cassette	Y	Sensor Sensitivity Adjustment	
4	VFK1811	EVR Adjustment Software	N	PC Electrical Adjustment System	**NEW**
5	VFK1308P	Measuring Board	Y	Test point Board and PC I/F	
6	VFK1309A	EVR Connector Board	N	Connection for PC Adjustment	**NEW (NOTE)**
7	VFK1694	EVR Extender board	Y	Connection for PC Adjustment	
8	VJA0941	DC Cable	Y	Power Supply for Measuring Board	
9	VFK1317	30pin Flat Cable	Y	Between Meas. & Con. Boards	
10	VFK1809	72mm Attachment Ring	N	Camera Adjustment	**NEW**
11	VFK1164TAR43	43mm Attachment Ring	Y	Camera Adjustment	
12	VFK1164TCM01	Collimator Set (Infinity Lens)	Y	Camera Adjustment	
13	VFK1341	CC Filter (LB40)	Y	Camera Adjustment	
14	VFK1347	CC Filter (LB120)	Y	Camera Adjustment	
15	VFK1345	CC Filter Holder	Y	Camera Adjustment	
16	VFK1346	Step Down Ring	Y	Camera Adjustment	
17	VFK1659	Step-Up Ring(43mm-49mm)	Y	Camera Adjustment	
18	VFK1660	Step-Up Ring(49mm-62mm)	Y	Camera Adjustment	
19	VFK1481E	LISTA Software	Y	LISTA Adjustment	
20	VFK1409A	Measuring Board	N	LISTA Adjustment	**NEW (NOTE)**
21	VFK1233	Mech. Neutral Plate	Y	Mechanical Maintenance	
22	VFK1266	Gear Driver	Y	Mechanical Maintenance	
23	VFK1149	Post Driver	Y	Tape Post Height Adjustment	
24	VFK1151	Nut Driver(2.5mm)	Y	Tape Post Height Adjustment	
25	VFK1810	LISTA Measuring Board	N	LISTA Adjustment	**NEW**
26	VFK1186	LISTA Cable	Y	LISTA Adjustment	

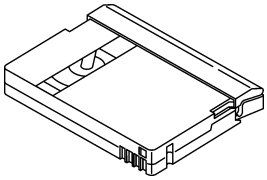
NOTE:

1. If you already have VFK1309, if can be modified to VFK1309A.
   Please refer to explanation on section 4.
2. If you already have VFK1409S, if can be use to LISTA adjustment with VFK1810 instead of VFK1409A.
   How to install the VFK1810 to VFK1409S, please refer to explanation in section 3.

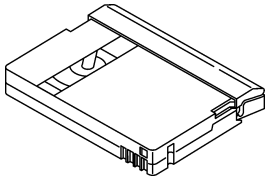
1 **VFM3010EDS**
DV Alignment Tape
(Color bar)



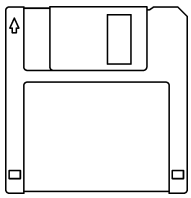
2 **VFM3000EDS**
DV Alignment Tape
(Linearity)



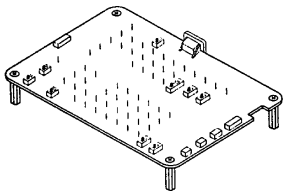
3 **VFK1217**
Tape End／Beg. Detect
Cassette



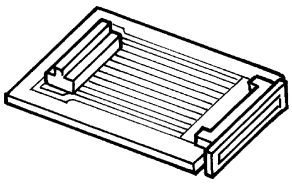
4 **VFK1811**
EVR Adjustment Software



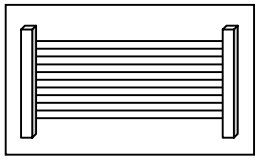
5 **VFK1308P**
Measuring Board



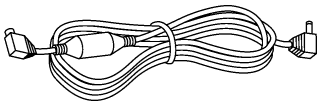
6 **VFK1309A**
EVR Connector Board



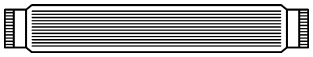
7 **VFK1694**
EVR Extender Board



8 **VJA0941**
DC Cable

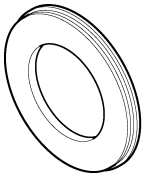


9 **VFK1317**
30pin Flat Cable

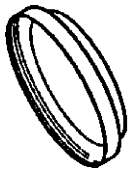


(Measuring Board is required 2pcs. of this cable)

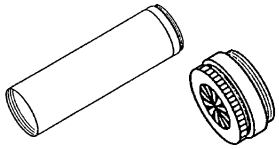
10 **VFK1809**
72mm Attachment Ring



11 **VFK1164TAR43**
43 mm Attachment Ring



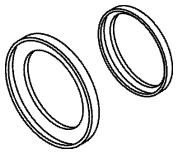
12 **VFK1164TCM01**
Collimator Set
(Infinity Lens)



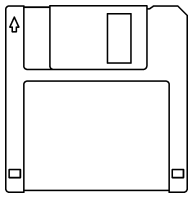
13 **VFK1341** (LB40)
14 **VFK1347** (LB120)
CC Filter

15 **VFK1345**
CC Filter Holder
16 **VFK1346**
Step Down Ring

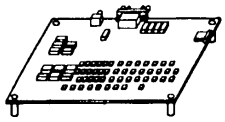
17 **VFK1659**
Step-up Ring (43mm 49mm)
18 **VFK1660**
Step-up Ring (49mm 62mm)



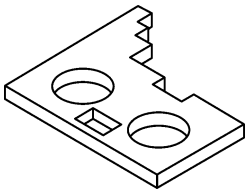
19 **VFK1481E**
LISTA Software



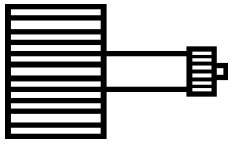
20 **VFK1409A**
Measuring Board



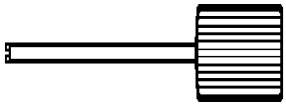
21 **VFK1233**
Mech. Neutral Plate



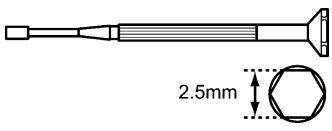
22 **VFK1266**
Gear Driver



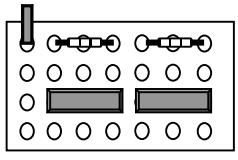
23 **VFK1149**
Post Driver



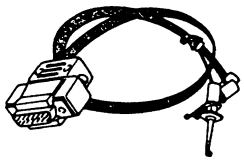
24 **VFK1151**
Nut Driver (2.5mm)



25 **VFK1810**
LISTA Measuring Board



26 **VFK1186**
LISTA Cable



2. MAINTENANCE

Maintenance is done by periodically performing suitable maintenance servicing in order to maintain the functions always in the best condition, so that the user can use the equipment safely. Video equipment with mounted mechanisms uses wear parts, and their wear and deterioration causes troubles. Dust and dirt also can impair stable operation. For this reason it is important not to just perform repair at the time of trouble, but also to perform suitable maintenance at regular intervals.

2-1. Maintenance Chart

The following periodic maintenance is required to maintain AG-DVX100 in good condition

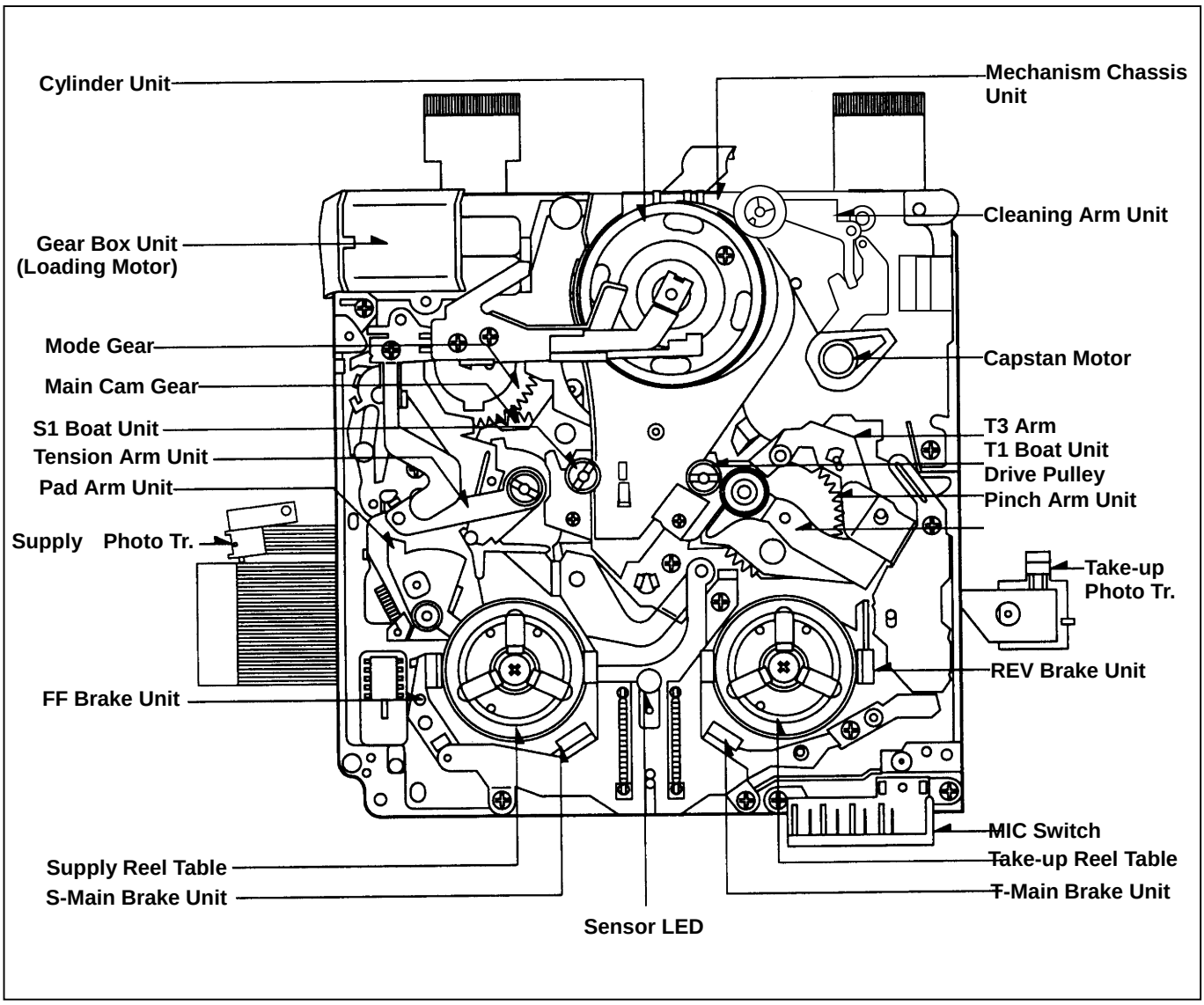
No.	Part Name	Part No.	Cleaning	Replacement	Remark
	Tape Transport Part	------	100 hours	------	*1
1	Cylinder Unit	VEG1573	100 hours	Every 1000 hours	
2	Pinch Arm Unit	VXL3161	------	Every 1000 hours	
3	Cleaning Arm Unit	VXL3103	------	Every 1000 hours	
4	Gear Box	VXA5417	------	Every 1000 hours	
5	REV Brake Unit	VXZ0323	------	Every 1000 hours	
6	FF Brake Unit	VXZ0322	------	Every 1000 hours	
7	S-Main Brake Unit	VXZ0321	------	Every 1000 hours	
8	T-Main Brake Unit	VXZ0319	------	Every 1000 hours	
9	Supply Reel Table	VXR0355	------	Every 1000 hours	
10	Take-up Reel Table	VXR0356	------	Every 1000 hours	
11	Made Cam SW Unit	VSR0114	------	Every 1000 hours	
12	Main Cam Gear	VXA5407	------	Every 1000 hours	
13	S1 Boat Unit	VXA5409	------	Every 1000 hours	
14	T1 Boat Unit	VXA5410	------	Every 1000 hours	
15	Tension Arm Unit	VXL2456	------	Every 1000 hours	
16	Pad Arm Unit	VXL2732	------	Every 1000 hours	
17	Mechanism Chassis Unit	VXY1738S	------	Every 3000 hours	*2

Note:
Using hours are based on the head rotation hours. (HOUR METER can be confirm on item HOUR METER in OTHER FUNCTION menu.)
Using hours are recommendation. It may depend on temperature, humidity, quality of tape or dust condition.
Using hours are listed as the reference of maintenance. They do not mean guarantee hours.

*1 Tape transport parts mean following parts.
(Tension Post, S3 Post, S2 Post, S1Roller, Cylinder & Heads,T1 Roller, T2 Post, Capstan Shaft, Pinch Roller and T3 Post)

*2 Parts listed from No.1 to 16 are included in Mechanical Chassis Unit. Replacing the Mechanism Chassis Unit is recommended every 3000 hours.

2-2. Mechanical Parts Location



3. MANUAL TAPE EJECT (EMERGENCY EJECT)

When the tape cannot be ejected by normal operation because of trouble in the electrical system or mechanical system, the tape can be removed from the unit manually by using the following method.

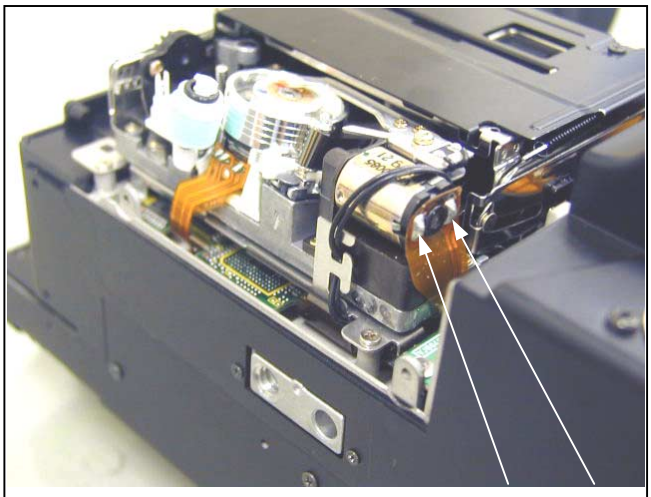
1. Remove the Grip Cover Unit.
2. Supply 4.5 Volts using 3 AA batteries in series to unload the posts using the motor.
3. Stop supplying the power at unloading complete position.

NOTE: If supply the power continuously, the Cassette Up Unit be eject.

4. It has lifted a tape with the finger from the front as shown in the figure and it makes space, it confirms the position of a supply reel. It inserts stick as shown in the figure, it turns a supply reel to counterclockwise from the front and it rolls up a tape.

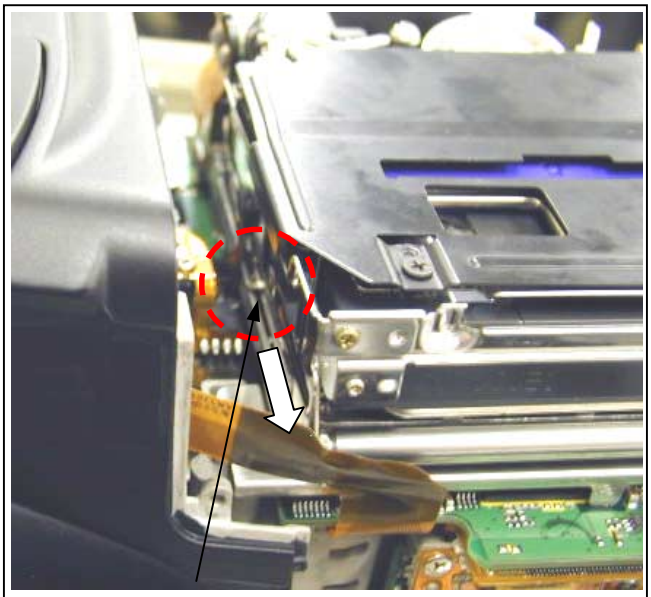
NOTE: Please use the one which doesn't damage the Supply Reel with the non-magnetism type.

5. Push the lock lever to arrow direction as shown in figure 3 to eject the Cassette Up Unit and remove the tape.



UNLOADING.....A: +4.5V B: GND
LOADING .....A: GND B: +4.5V

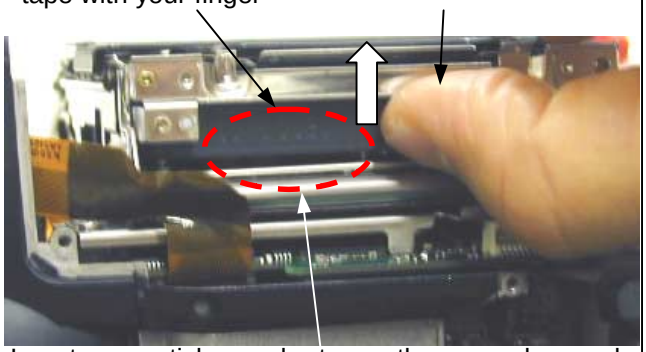
Figure 1



Change to LOCK LEVER

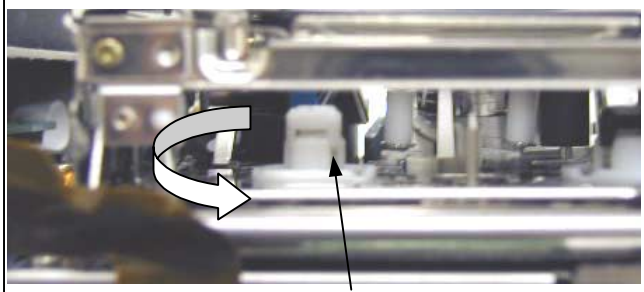
Figure 3

Confirm the position of the supply reel and lift the tape with your finger



Insert a stick and turn the supply reel counterclockwise from the front and roll the tape back into the cassette.

It has a condition with no tape.



The supply reel base

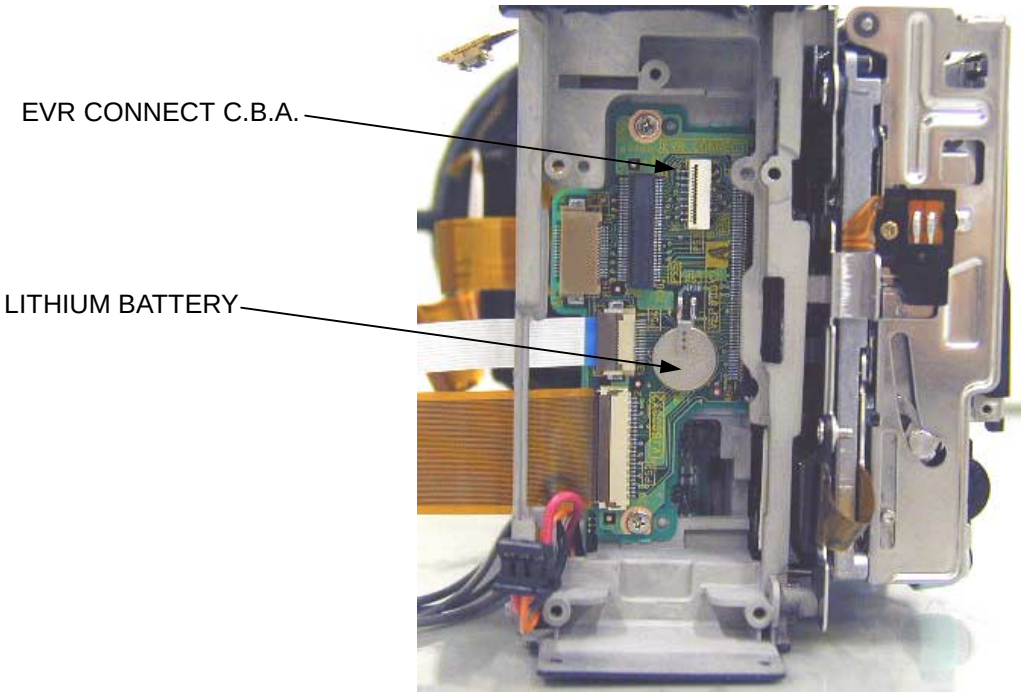
Turn the supply reel counterclockwise and this will take up the slack in the tape.

Figure 2

4. LITHIUM BATTERY

4-1. Replacement Procedure

1. Remove the EVR CONNECT C.B.A. (Refer to Disassembly Procedures).
2. Unsolder the Lithium battery “Ref No: B51/Part No: VSB0407” and then replace with the new one.



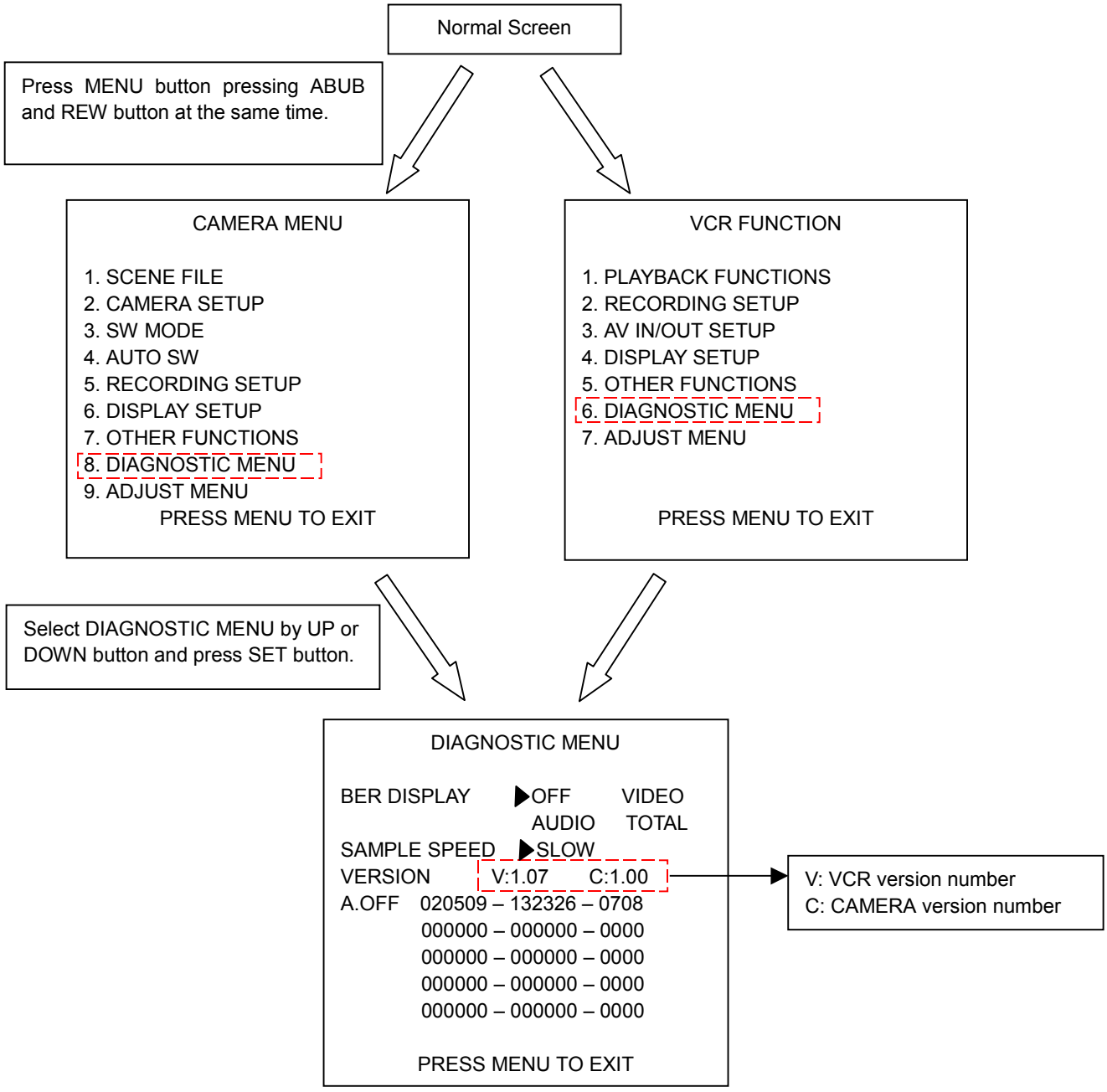
NOTE:
The lithium battery is a critical component.
It must never be subjected to excessive heat of discharge.
It must therefore only be fitted in equipment designed specifically for its use.
Replacement batteries must be of the same type and manufacture.
They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.
Do not attempt to re-charge the old battery or re-use it for any other purpose.
It should be disposed of in waste products destined for burial rather than incineration.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the equipment manufacturer.
Discard used batteries according to manufacture’s instructions.

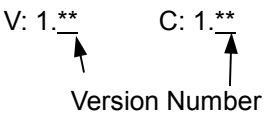
5. DIAG MENU

The DIAGNOSTIC menu is the menu to confirm the condition of the VCR and it is possible to do the confirmation of the error rate, software version and auto off log.
When pressing the MENU button while pressing the ADUB button and the REW button at the same time, DIAGNOSTIC menu can be displayed.
Next, the DIAGNOSTIC menu is open when selecting DIAGNOSTIC MENU in UP(▲:PLAY) or DOWN (▼:STOP) button and pressing the SET(STILL) button.
NOTE: Also ADJUST menu is displayed is VCR mode.



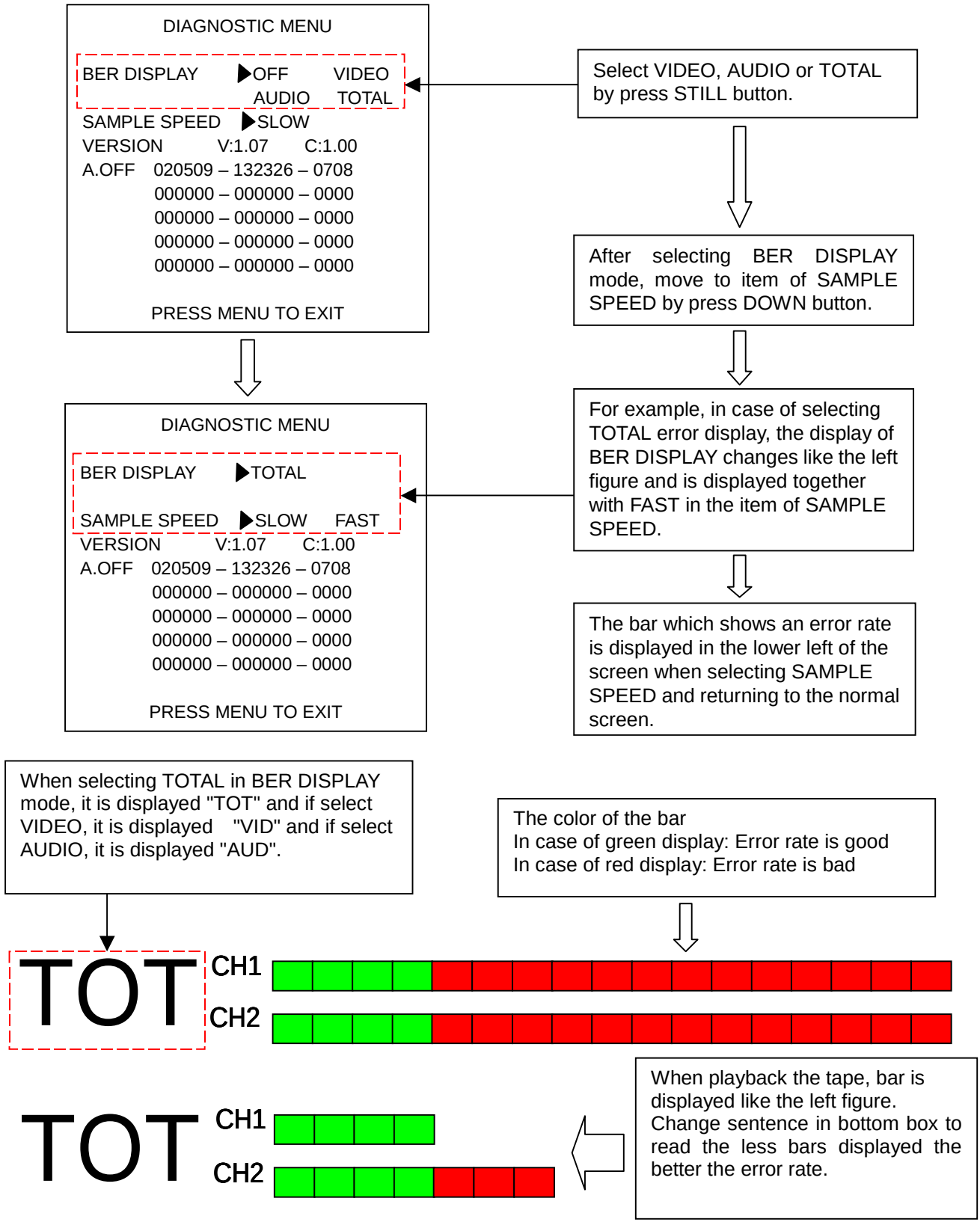
5-1. Software Version Display

Software version of VCR and CAMERA microprocessor is displayed



5-2. How to display the Error Rate.

The AG-DVX100 can be displayed Error Rate and it shows the playing condition of the VCR.
In case of the error rate is displayed, BER DISPLAY and SAMPLE SPEED mode is select on DIAGNOSTIC menu.


DIAGNOSTIC MENU
BER DISPLAY ▶OFF VIDEO
AUDIO TOTAL
SAMPLE SPEED ▶SLOW
VERSION V:1.07 C:1.00
A.OFF 020509 – 132326 – 0708
000000 – 000000 – 0000
000000 – 000000 – 0000
000000 – 000000 – 0000
000000 – 000000 – 0000
PRESS MENU TO EXIT
Select VIDEO, AUDIO or TOTAL by press STILL button.
After selecting BER DISPLAY mode, move to item of SAMPLE SPEED by press DOWN button.
For example, in case of selecting TOTAL error display, the display of BER DISPLAY changes like the left figure and is displayed together with FAST in the item of SAMPLE SPEED.
DIAGNOSTIC MENU
BER DISPLAY ▶TOTAL
SAMPLE SPEED ▶SLOW FAST
VERSION V:1.07 C:1.00
A.OFF 020509 – 132326 – 0708
000000 – 000000 – 0000
000000 – 000000 – 0000
000000 – 000000 – 0000
000000 – 000000 – 0000
PRESS MENU TO EXIT
The bar which shows an error rate is displayed in the lower left of the screen when selecting SAMPLE SPEED and returning to the normal screen.
When selecting TOTAL in BER DISPLAY mode, it is displayed "TOT" and if select VIDEO, it is displayed "VID" and if select AUDIO, it is displayed "AUD".
The color of the bar
In case of green display: Error rate is good
In case of red display: Error rate is bad
TOT
CH1
CH2
TOT
CH1
CH2
When playback the tape, bar is displayed like the left figure. Change sentence in bottom box to read the less bars displayed the better the error rate.

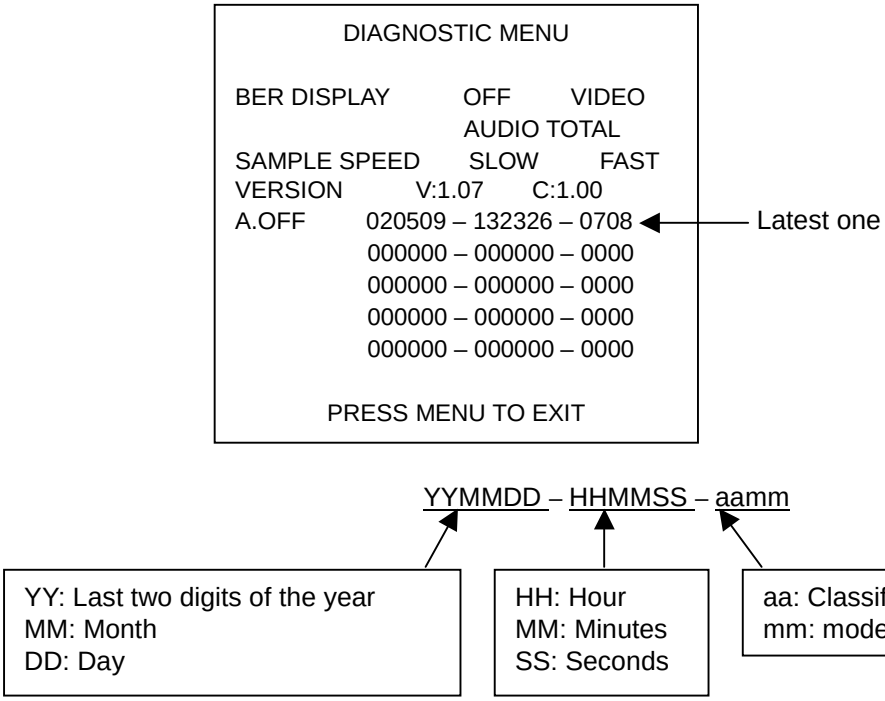
How to confirm the Error rate.

1. Select the TOTAL in item of BER DISPLAY.
2. Record the color bar signal on LP mode and playback the recorded portion. Confirm that the number of bar on display within 10 pieces.

5-3. Auto Off Log

The VCR can be displayed warning and auto off as alarm display. In case of the auto off occurred, the number and message are displayed in the normal screen. Contents of auto off can be confirm until previous 5 problem in diagnostic menu.

When auto off occurred, VCR is memorized date, time, classified of auto off and mode follow as below indicated format. Diagnostic menu can be displayed until previous 5 problem.

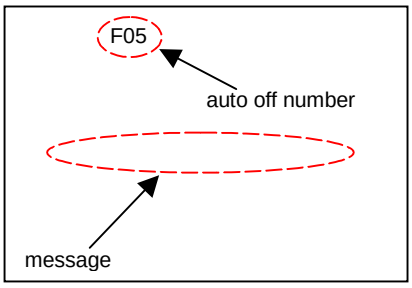


For example, in case of displayed “020209–132326–0708”, Cylinder Lock occurred in normal playback mode at 13:23:26 on Feb. 9th in 2002.
Please refer to below indicated tables with classification of auto off and mode.

< aa: Classified of AUTO OFF >

aa	Super display	Contents
01	F51	FOCUS MOTOR LOCK
03	F53	PSD NG
04	F54	GYRO NG
07	F05	CYLINDER LOCK
08	F04	LOADING LOCK
09	F03	UNLOADING LOCK
0A	F01	T REEL LOCK
0B	F02	S REEL LOCK

(super position of number and message)



< mm : MODE >

mm	Contents	mm	Contents
01	EJECT	12	AUDIO DUB RECORDING
02	STOP 1	13	CAMERA RECORDING STANDBY
03	STOP 2	14	CAMERA RECORDING
04	FAST FORWARD	15	CAMERA SEARCH (FORWARD)
05	REWIND	16	CAMERA SEARCH (REVERSE)
06	RECORDING STANDBY	17	REC REVIEW
07	MORMAL RECORDING	18	CAMERA EJECT
08	NORMAL PLAYBACK	19	CAMERA STOP
09	REVERSE PLAYBACK	1D	CYLINDER OFF
0A	CUE (FAST PLAYBACK)	22	SEARCH (FORWARD)
0B	REVIEW (FAST PLAYBACK)	23	SEARCH (REVERSE)
0C	SLOW PLAYBACK	24	BLANK SEARCH
0D	REVERSE SLOW PLAYBACK	25	FRAME ADVANCE PLAYBACK
11	AUDIO DUB STANDBY	26	REVERSE FRAME ADVANCE PLAYBACK

5-4. Adjust Menu

Item	Set value / Display	contents
ATF GAIN		· To confirm the ATF sensitivity, change the tape speed. · By pressing SET button, enter the adjustment mode and then exit the menu once. It can be operated VTR operation that the menu mode is exited temporary. In this time, the screen is displayed as follow. NOW SERVO ADJUST PUSH MENU TO RETURN It will be returned to ADJUST MENU when the MENU key is pressed in this condition.
LINEARITY		· To confirm the LINEARITY, change the ATF sensitivity. · By pressing SET button, enter the adjustment mode and then exit the menu once. It can be operated VTR operation that the menu mode is exited temporary. In this time, the screen is displayed as follow. NOW SERVO ADJUST PUSH MENU TO RETURN It will be returned to ADJUST MENU when the MENU key is pressed in this condition.
Y LEVEL		It is adjusted the output of Y level.
C LEVEL		It is adjusted the output of C level.
DEFECT COMP	0 1 2 3	DEFECT COMP 0 1 2 3 Median filter ON ON OFF OFF Address defect compensation ON OFF ON OFF
CAM DBG INF	<u>OFF</u> ON	It can be selected ON/OFF that the screen of camera debag information. Not displayed Displayed
EEPROM VERSION		It is displayed the version of EEPROM on the VTR C.B.A..

6. CAMERA REMOTE

The control equipment is connected to CAMERA REMOTE jack to enable zooming and record start/stop to be initiated by remote control.

NOTE: CAMERA remote control is only effective CAMERA mode.

Please refer to below indicated specification, in case of external remote performed.

Equivalent circuit of CAM REMOTE jack

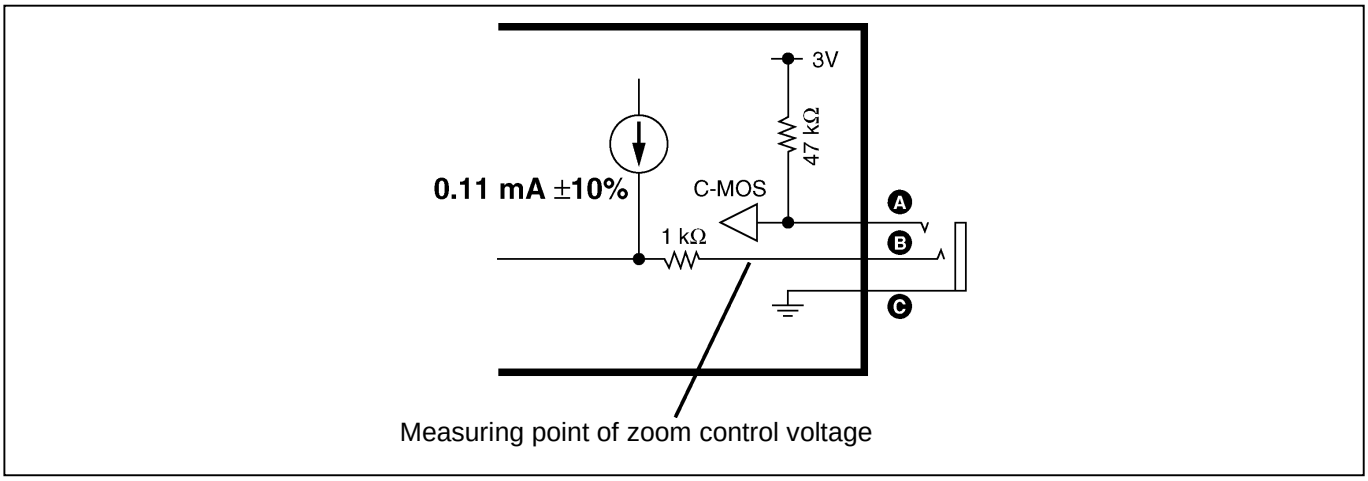


Figure A

Terminal (refer to figure A)	Contents
A	Record start/stop input
B	Zooming control input
C	GND

6-1. Record start / stop input

Every time it connects A terminal with the GND, it repeats recording and a recording stop.

6-2. Zooming control input

With the voltage to input to the B terminal, the zoom speed changes. As for the relation between the zoom control voltage and the zoom speed, it is as shown in the following.

Relation between the zoom control voltage and zoom speed

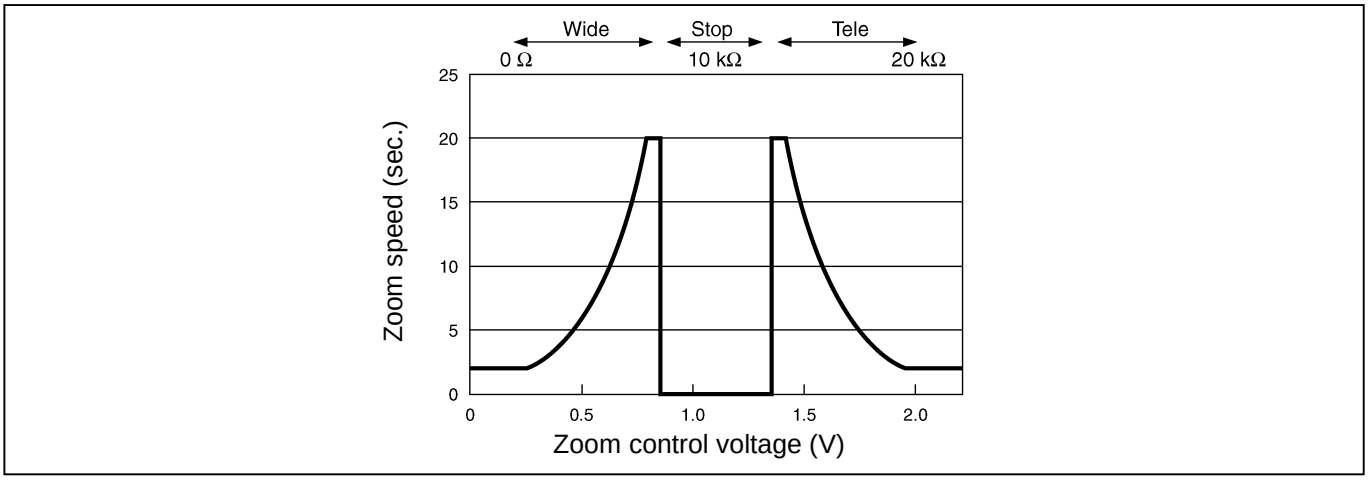
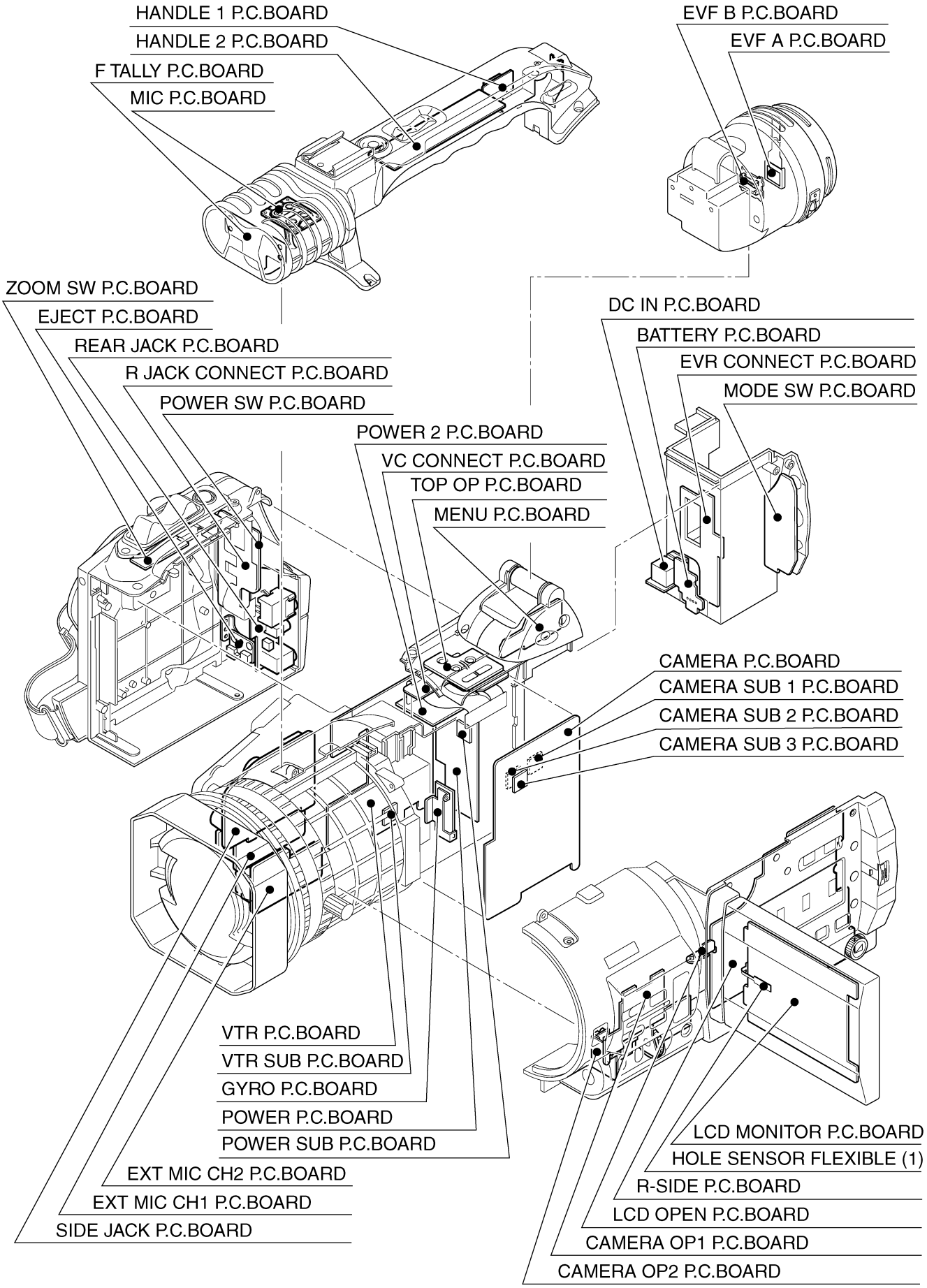


Figure B

7. CIRCUIT BOARD LAYOUT



SECTION 2

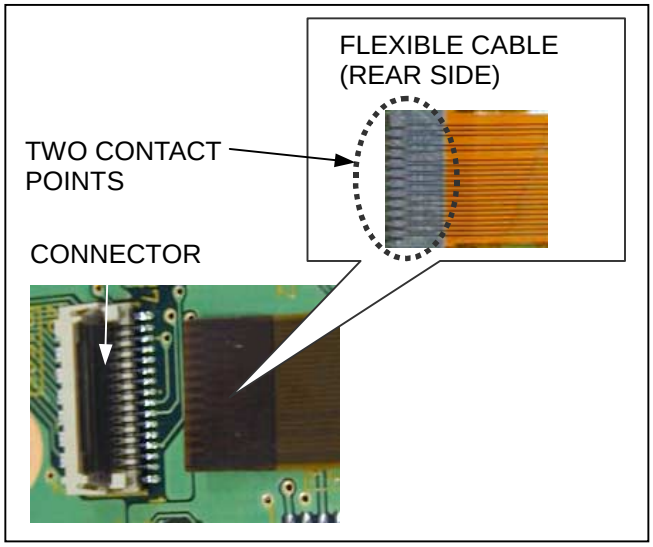
DISASSEMBLY PROCEDURES

CONTENTS

1. Note when inserting Flexible Cable DIS-1
2. Removal of Top Panel Unit DIS-1
3. Removal of Grip Cover Unit DIS-2
4. Removal of Mechanism Unit DIS-3
5. Removal of VTR C.B.A. DIS-4
6. Removal of Handle Unit DIS-3
7. Removal of EVF Unit DIS-4
8. Removal of Side Case (R) Unit DIS-4
9. Removal of LCD Unit DIS-5
10. Removal of CAMERA C.B.A. DIS-6
11. Removal of Lens Unit DIS-6
12. Removal of Back Panel Unit DIS-6
13. Removal of EVR CONNECT C.B.A. DIS-7

1. Note when inserting Flexible Cable

There are five flexible cables, which have two sets of contacts on each cable, see the figure below. When inserting these cables into the connector, make sure that the cables are fully inserted, if not they may damage the connector.



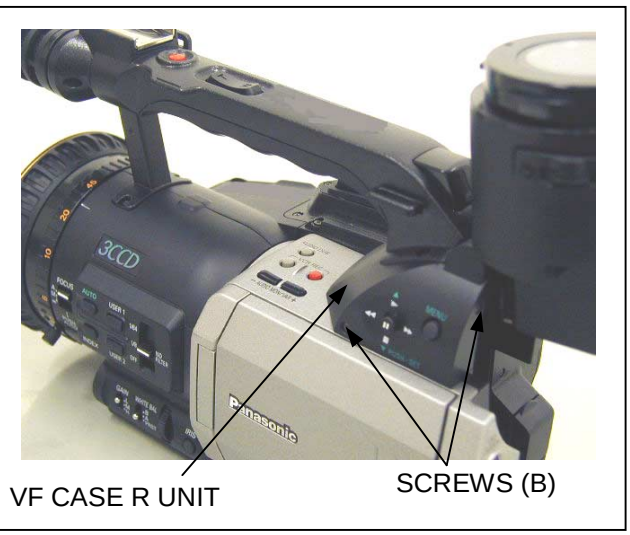
P52 on EVR CONNECT C.B.A.
P4604 and P4606 on R_SIDE C.B.A.
P1004 and P1006 on CAMERA C.B.A.

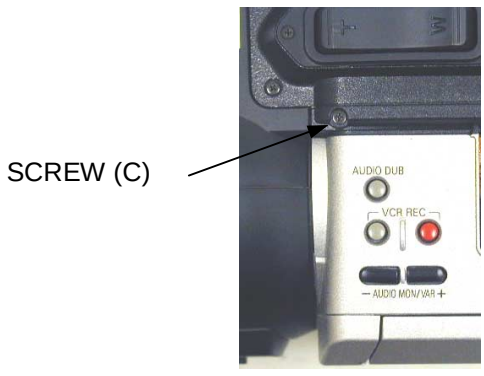
CCD ←→ P1004
LENS ←→ P1005
LCD Unit ←→ P4606
P52 (EVR CONNECT C.B.A.) ←→ P4604 (R_SIDE C.B.A.)

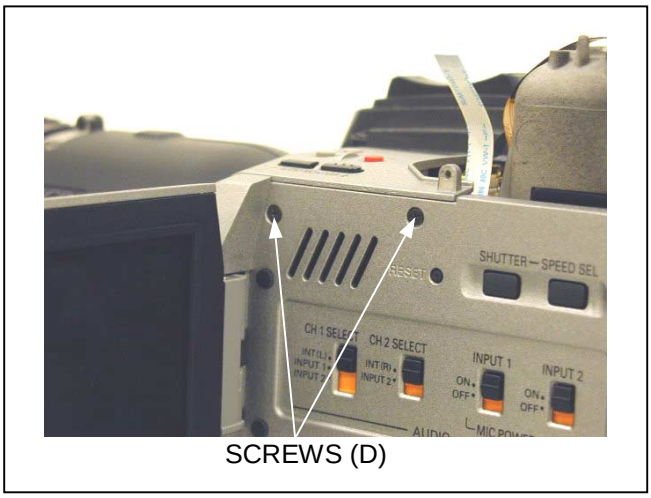
When P1004 flexible cable is not making correct contact, the camera's picture will not be seen.
When P1005 flexible cable is not making correct contact, the LENS will not operate.
When P4606 flexible cable is not making correct contact, the LCD Panel will not operate.
When P52 or P4604 flexible cable is not making correct contact, the VTR will not operate.
If any of the above symptoms occur after you assemble the AG-DVX100, please check the indicated connector.

2. Removal of Top Panel Unit

1. Unscrew the 2 screws (A) and remove the VF CASE (L).
2. Unscrew the 2 screws (B) and disconnect a connector P610 on MENU C.B.A., then remove the VF CASE R UNIT.
3. Unscrew 3 screws (C) and (D).
4. Disconnect a connector P553 on VC CONNECT C.B.A. and remove the Top Panel Unit.







SCREWS (D)

P553

TOP PANEL UNIT

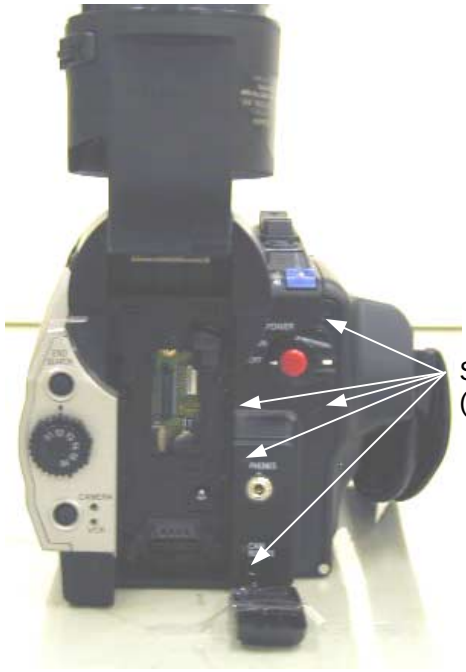
3. Removal of Grip Cover Unit

1. Remove the Top Panel Unit.
2. Unscrew the 4 screws (A) and unscrew the 5 screws (B).
3. Disconnect a connector (A) on VTR C.B.A. and remove the Grip Cover Unit.

SCREWS (A)

GRIP COVER UNIT

SCREWS (A)


SCREWS (B)

CONNECTOR (A)

4. Removal of Mechanism Unit

1. Remove the Grip Cover Unit.
2. Disconnect 2 connectors (A) and (B) on VTR C.B.A.
3. Unscrew the 2 screws (B).
4. Disconnect a connectors (C) on VTR C.B.A.
5. Unscrew the 4 screws (A) and remove the Mechanism Unit.

NOTE:

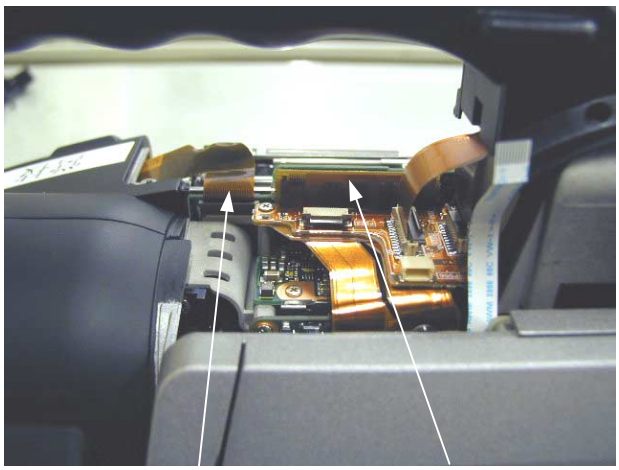
When remove the Mechanism Unit, the connector (D) which combines the VTR C.B.A with Mechanism Unit is disconnected. Also the connector (E) and (F) which combines the VTR C.B.A with Mechanism Unit is disconnected.

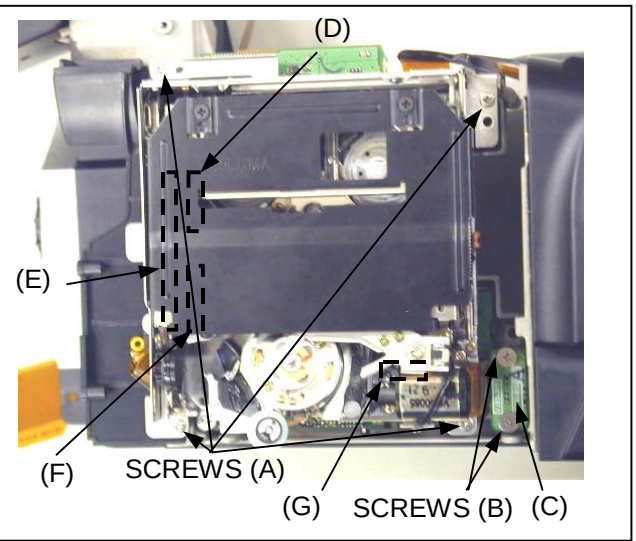
Check the connector has been connected securely when the Power Supply Unit is installed.

6. Disconnect a connectors (G) on VTR C.B.A.

NOTE:

When installing a mechanism unit, make the condition which closed the lid of the connector (B) on the VTR C.B.A.



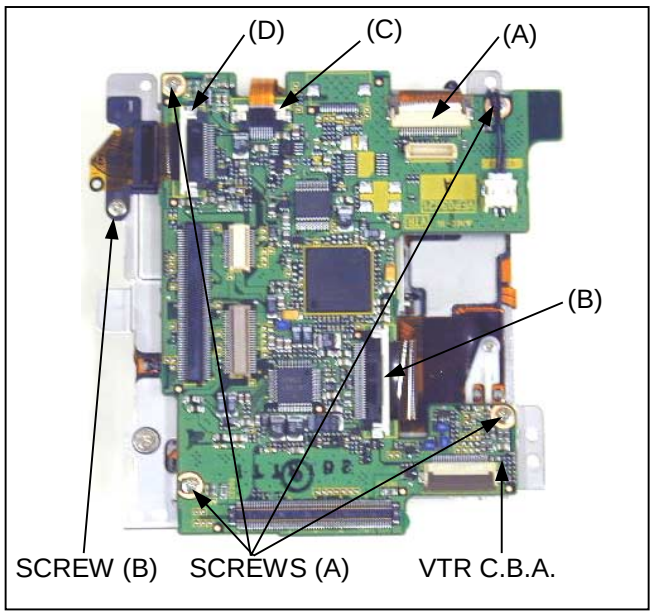


5. Removal of VTR C.B.A.

1. Remove the Mechanism Unit.
2. Disconnect 4 connectors (A), (B), (C) and (D) on VTR C.B.A.
3. Unscrew the 4 screws (A) and remove the VTR C.B.A..

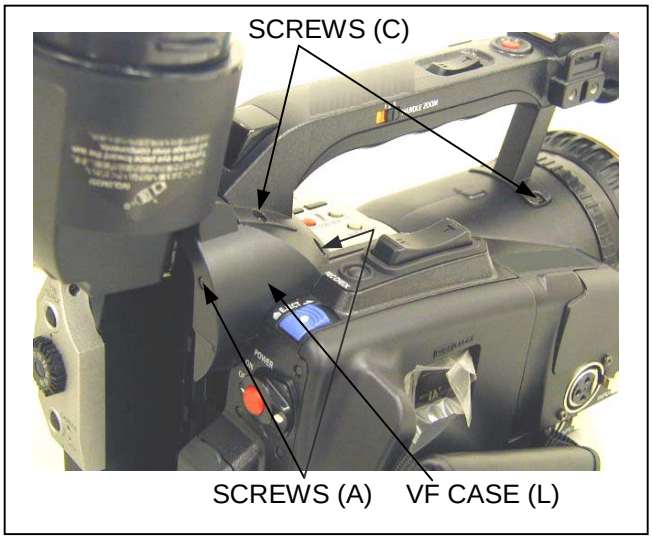
NOTE:

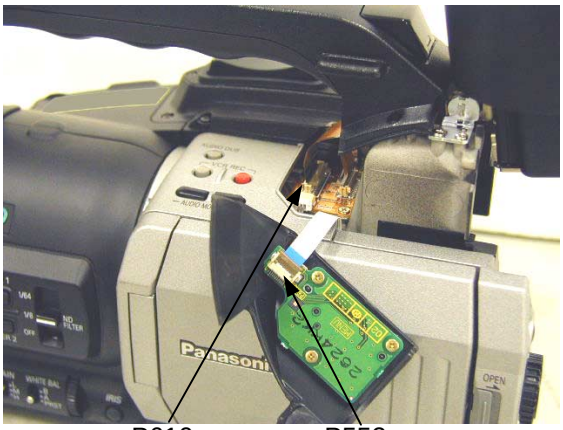
When inserting a connector (D) the connector is easy to insert when removing screw (B).



6. Removal of Handle Unit

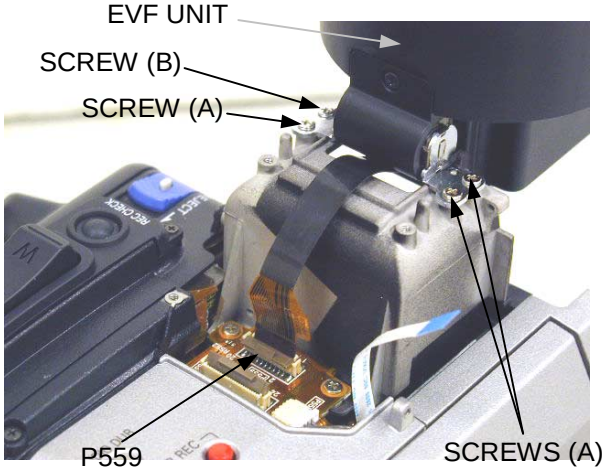
1. Unscrew the 2 screws (A) and remove the VF CASE (L).
2. Unscrew the 2 screws (B) and disconnect a connector P610 on MENU C.B.A., then remove the VF CASE R UNIT.
3. Disconnect a connector P552 on VC CONNECT C.B.A..
4. Unscrew the 4 screws (C) and remove the Handle Unit.





7. Removal of EVF Unit

1. Remove the Handle Unit.
2. Unscrew the 3 screws (A) and disconnect a connector P559 on VC CONNECT C.B.A..
3. Make the condition which lift up the EVF Unit as shown figure and unscrew the 1 screw (B), then remove the EVF Unit.

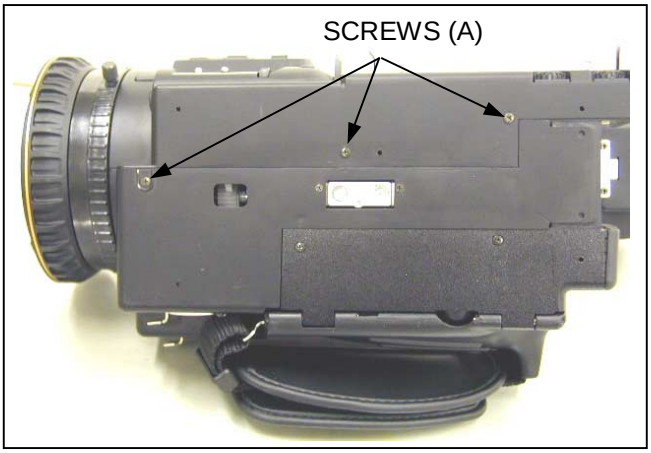


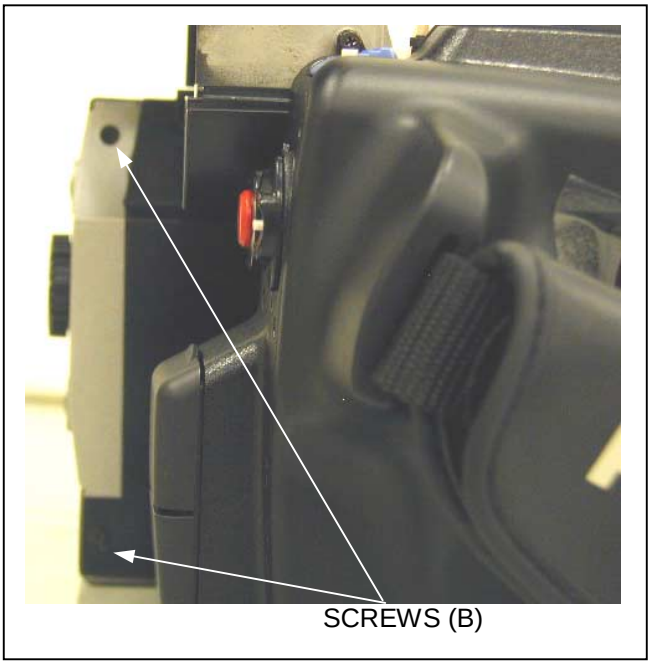
8. Removal of Side Case (R) Unit

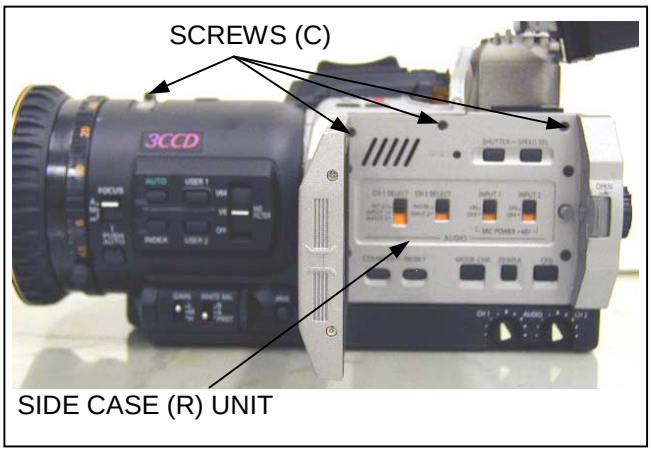
1. Remove the Handle Unit.
2. Unscrew the 5 screws (A) and (B).
3. Unscrew the 4 screws (C).
4. Disconnect a connector P556 on VC CONNECT C.B.A..
5. Disconnect a connector (A) on CAMERA C.B.A..
6. Disconnect a connector P4603 on R-SIDE C.B.A..
7. Disconnect a connector P4604 on R-SIDE C.B.A. and remove the Side Case (R) Unit.

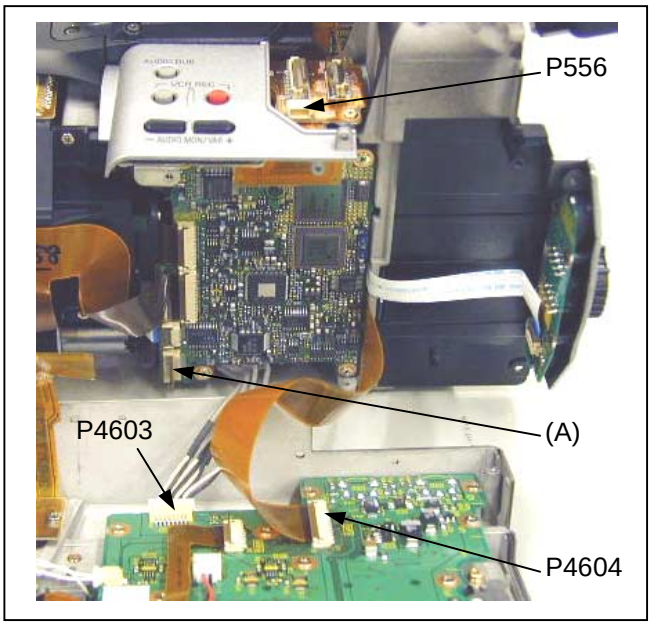
NOTE:

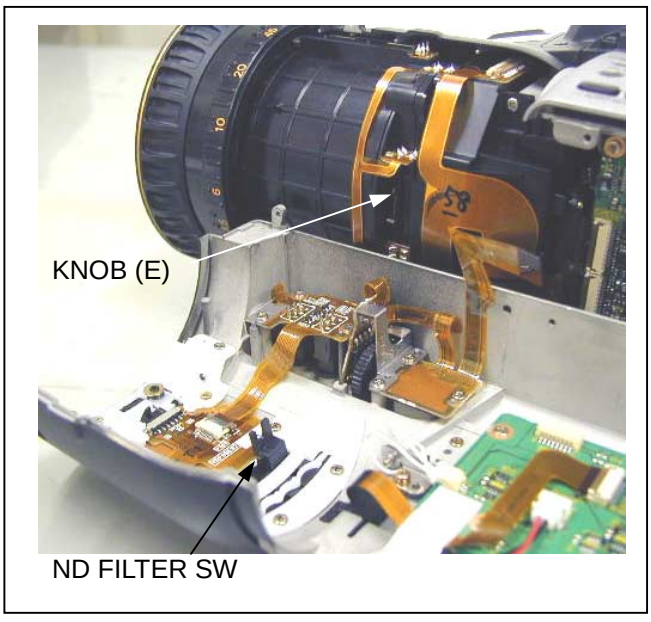
When installing a Side Case (R) unit, make the condition that ND FILTER SW is inserted in the knob(E) of part of ND filter on the lens unit (As for the figure, ND FILTER SW shows the condition of OFF).





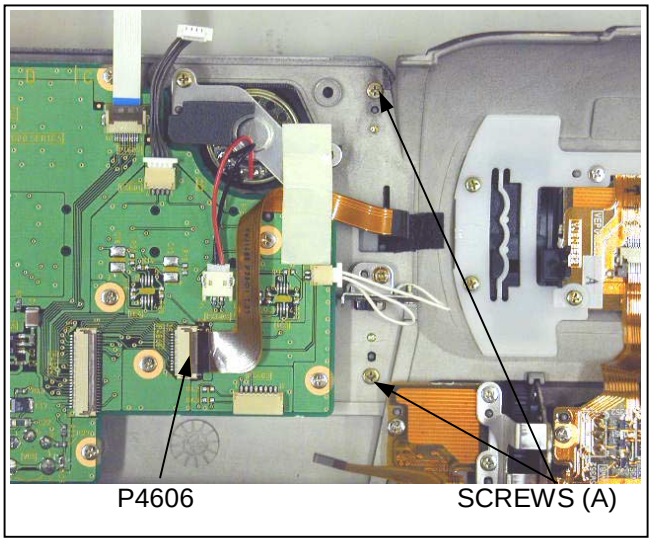


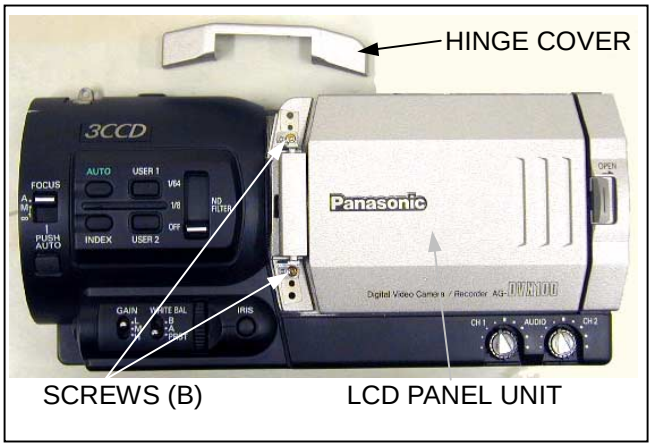




9. Removal of LCD Unit

1. Remove the Handle Unit.
2. Remove the Side Case (R) Unit.
3. Unscrew the 2 screws (A) and remove the HINGE COVER.
4. Disconnect a connector P4606 on R-SIDE C.B.A..
5. Unscrew the 2 screws (B) and remove the LCD Unit.





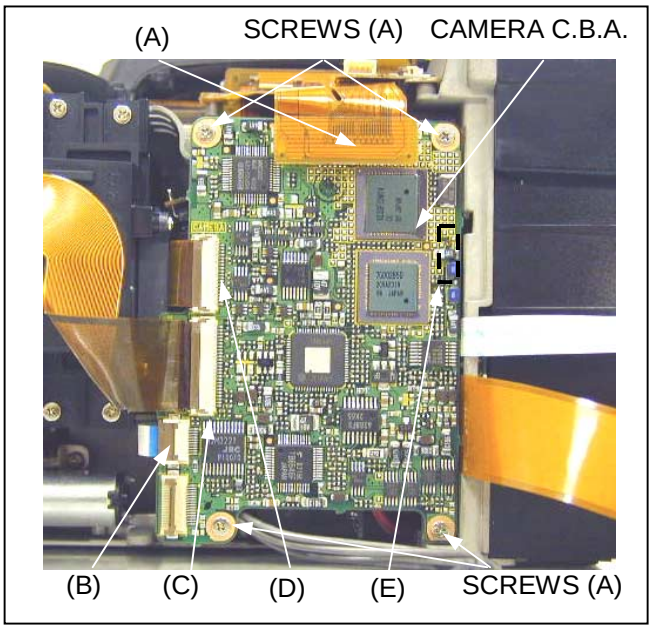
10. Removal of CAMERA C.B.A.

1. Remove the Handle Unit.
2. Remove the Top Panel Unit.
3. Remove the Side Case (R) Unit.
4. Disconnect 4 connectors (A), (B), (C) and (D) on R-SIDE C.B.A..
5. Unscrew the 4 screws (A) and remove the CAMERA C.B.A..

NOTE:

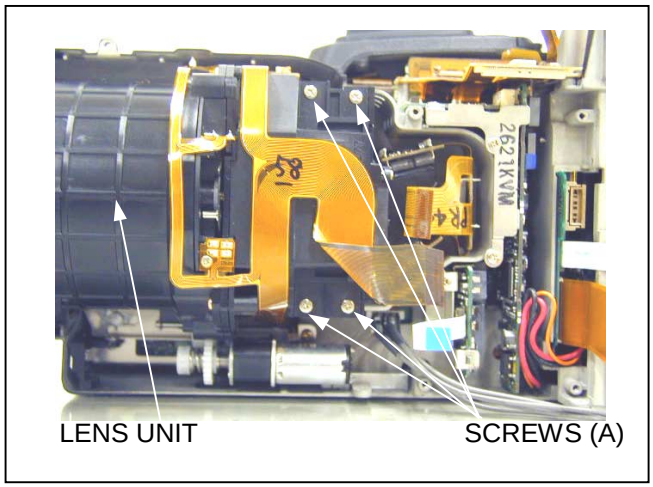
When remove the CANERA C.B.A., the connector (E) which connected between CAMERA and EVR CONNECT C.B.A. is disconnected.

Check the connector has been connected securely when the CAMERA C.B.A. is installed.



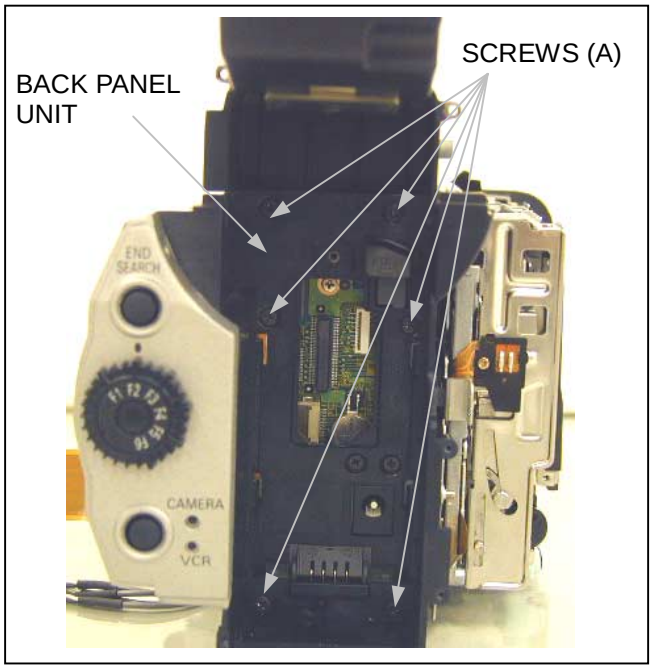
11. Removal of Lens Unit

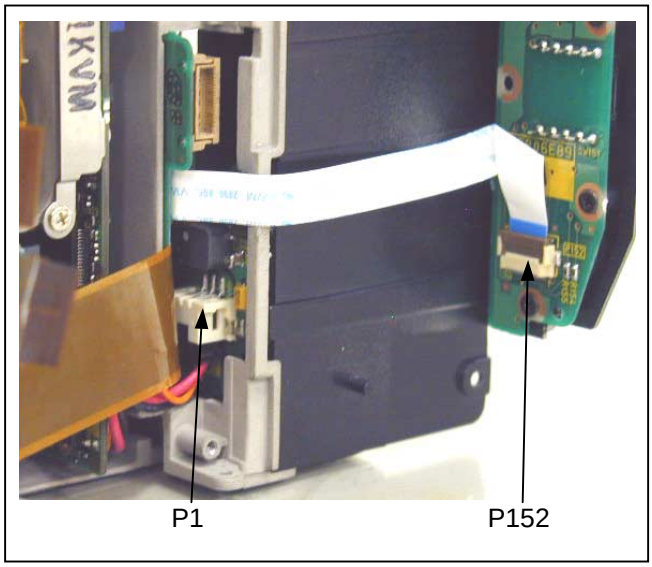
1. Remove the Handle Unit.
2. Remove the Top Panel Unit.
3. Remove the Side Case (R) Unit.
4. Remove the CAMERA C.B.A..
5. Unscrew the 4 screws (A) and remove the CAMERA C.B.A..



12. Removal of Back Panel Unit

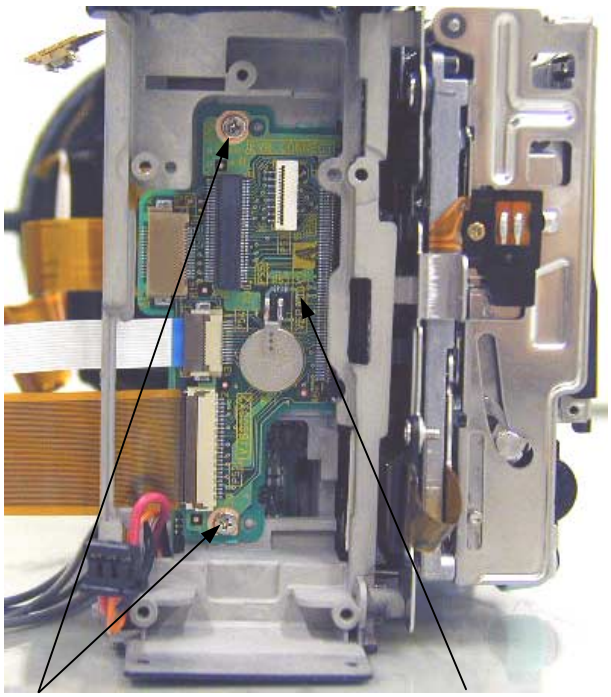
1. Remove the Grip Cover Unit.
2. Remove the Handle Unit.
3. Remove the Top Panel Unit.
4. Remove the Side Case (R) Unit.
5. Remove the CAMERA C.B.A..
6. Disconnect a connector P152 on MODE SW C.B.A..
7. Unscrew the 6 screws (A).
8. Disconnect a connector P1 on BATTERY C.B.A.. and remove the Back Panel unit.





13. Removal of EVR CONNECT C.B.A.

1. Remove the Grip Cover Unit.
2. Remove the Handle Unit.
3. Remove the Top Panel Unit.
4. Remove the Side Case (R) Unit.
5. Remove the CAMERA C.B.A..
6. Remove the Back Panel Unit.
7. Unscrew the 2 screws (A) and remove the EVR CONNECT C.B.A..



SECTION 3

MECHANICAL ADJUSTMENT

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1. MECHANICAL ADJUSTMENT AND CONFIRMATION

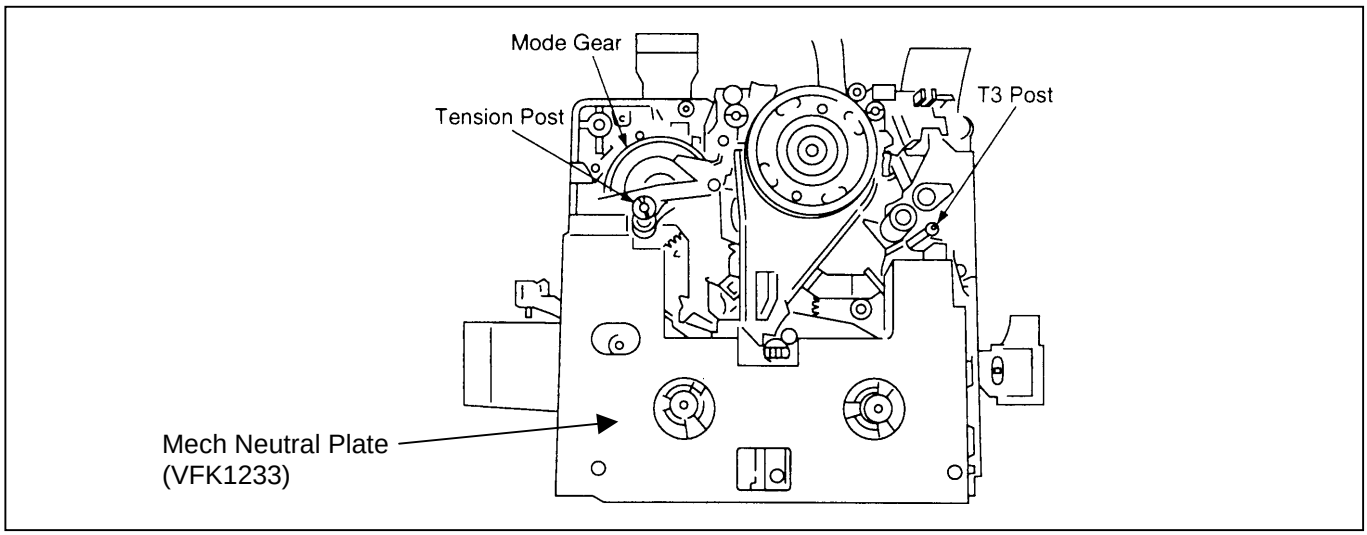
When the following parts are replaced, the mechanical adjustment is required.
Tension Post
T3 Post
Pad Arm Unit
Supply or Take-up Reel Tables

1-1. Tension Post & T3 Post Height Adjustment

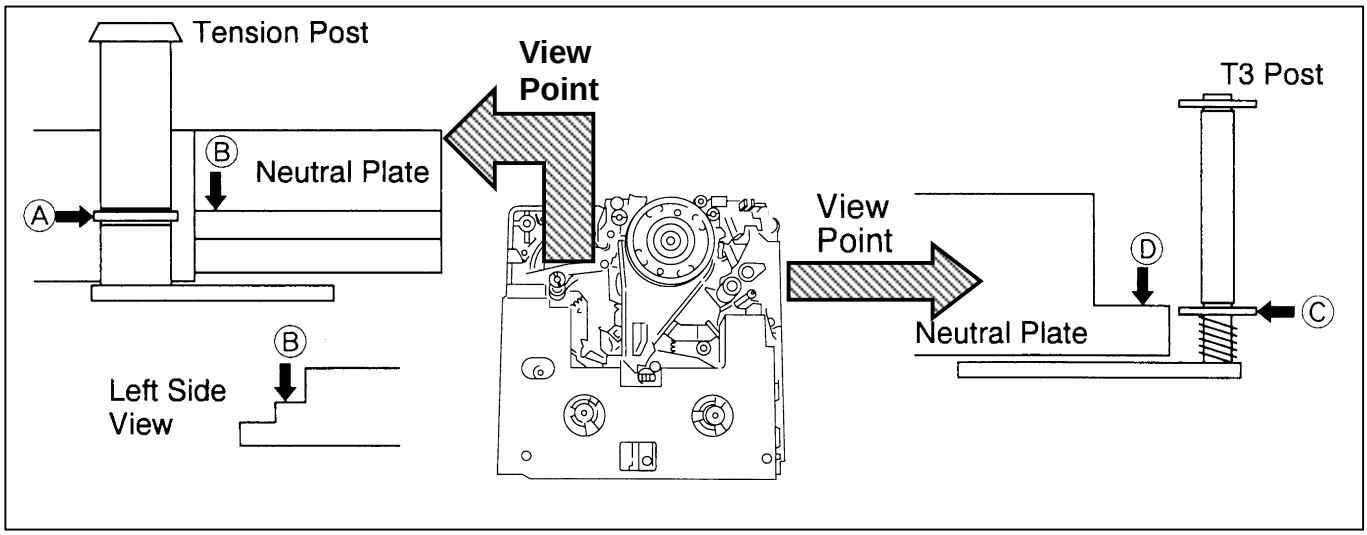
1. Remove the Cylinder Hold Angle and Loading Motor Unit.

NOTE: Not required remove the flexible cable from Loading Motor.

2. Set the Mechanism Plate (VFK1233) on the Mechanism Chassis.
3. Turn the Mode Gear fully clockwise to make full loading condition by using Loading Gear Driver (VFK1266).



4. Adjust the height of Tension Post by VFK1149 so the lower flange (A) point become same height of the top surface (B) of 2nd step of the Mechanism Plate as shown in Figure.
5. Adjust the height of T3 Post by VFK1151 so that the lower flange (C) point become same height of the top surface (D) of the Mechanism Plate as shown in Figure.

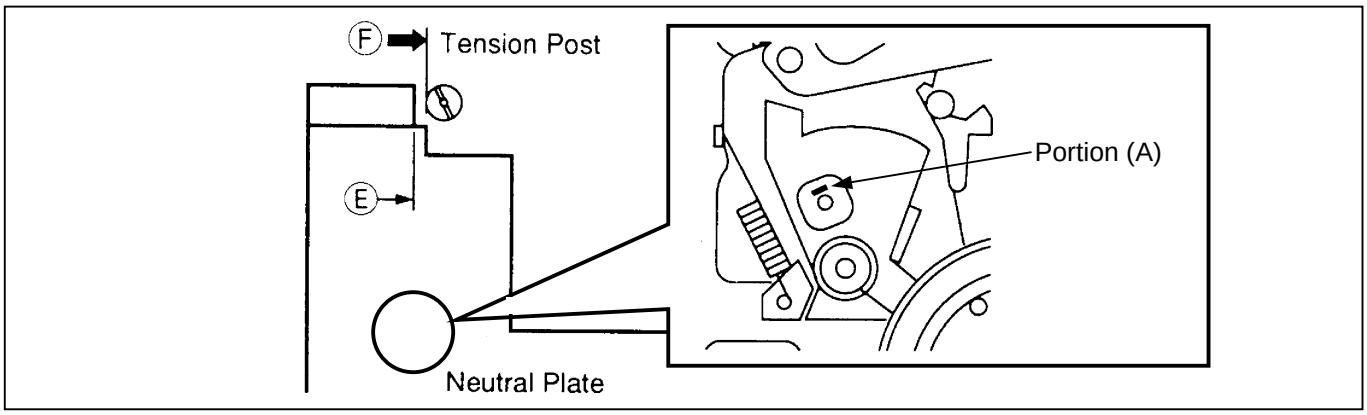


1-2. Tension Post Position Adjustment

1. Remove the Cylinder Hold Angle and Loading Motor Unit.

NOTE: Not required remove the flexible cable from Loading Motor.

2. Turn the Mode Gear to set the Mechanism position in the play mode, that the Soft Brake of the Pad Arm Unit just touch to the Supply Reel Table as shown in Figure.
3. Set the Mechanism Plate on the Mechanism Chassis as shown in Figure.
4. Insert the tip of minus driver to portion(A) as shown in figure and turn clockwise slowly until the surface of the Tension Post comes to 2nd step(“F” Portion of tension post is just touch to “E” portion as shown in figure).



5. After adjustment, turn the Mode Gear to unloading direction then turn back to loading direction, and make sure that position is correct at above specification in Play position.

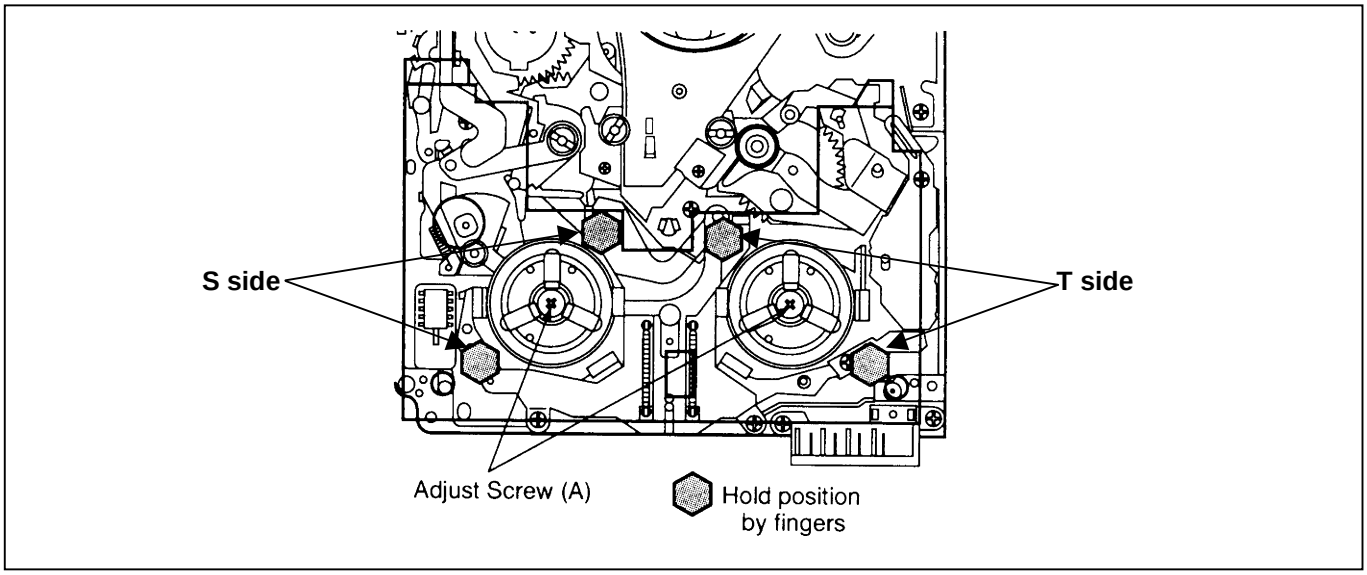
1-3. Supply & Take-up Reel Table Adjustment

This adjustment should be performed for Supply or Take-up Reel Table one by one.

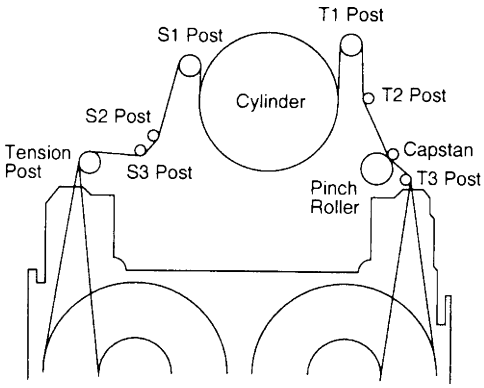
1. Remove the Cylinder Hold Angle and Loading Motor Unit.

NOTE: Not required remove the flexible cable from Loading Motor.

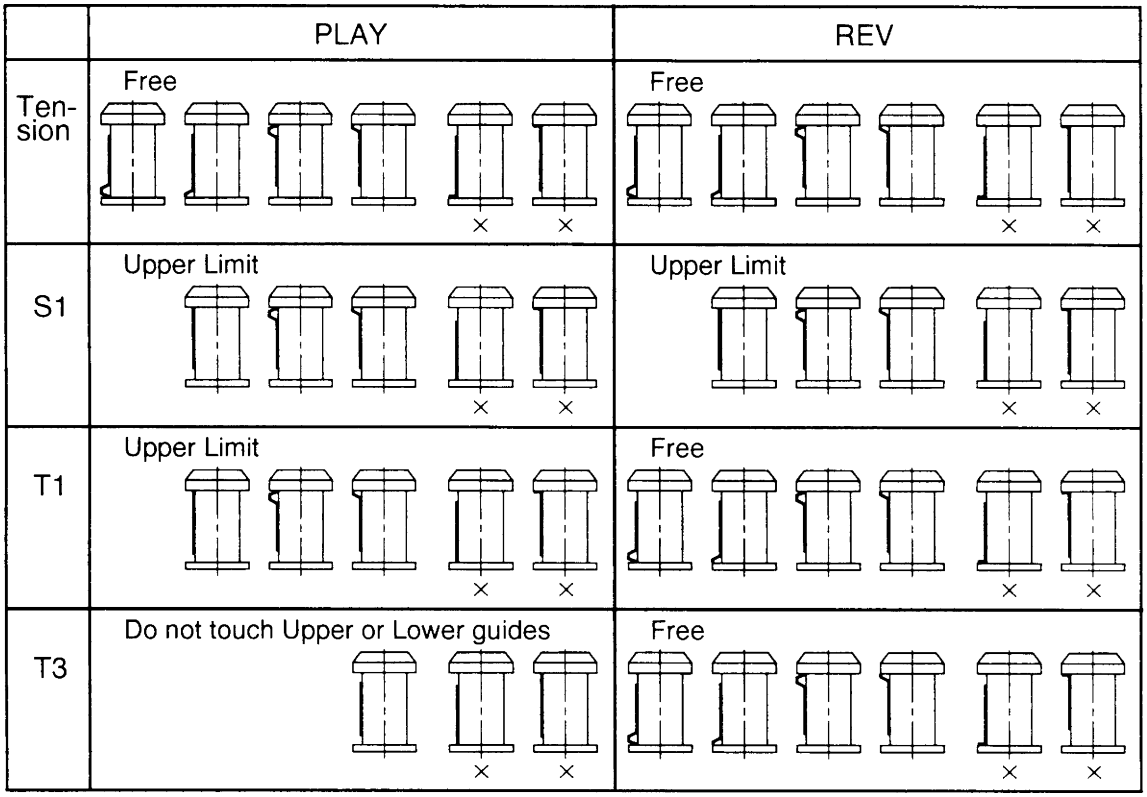
2. Turn the adjustment screw (A) on top of the Supply or Take-up Reel Table fully clockwise. Then, place the Mechanism Plate on the Mechanism Chassis as shown in Figure.
3. Hold the Mechanism plate by finger and slowly turn the adjustment screw counterclockwise until Reel Table just rotate with adjustment screw as shown in Figure.
4. Remove the Mechanism Plate and hold the Reel Table by finger then turn the adjustment screw counterclockwise to 45 degrees from above step point.



1-4. Confirmation of Tape Pass



1. Play back the cassette tape and confirm that the tape pass without curling at the upper and lower guides of the following posts in the Play and REV modes as shown in Figure.

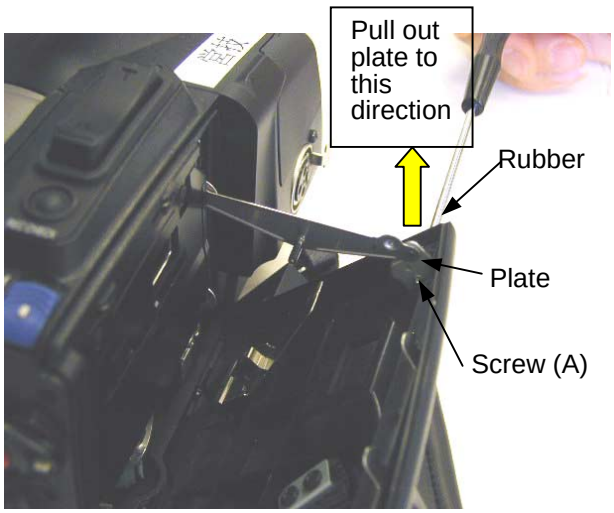


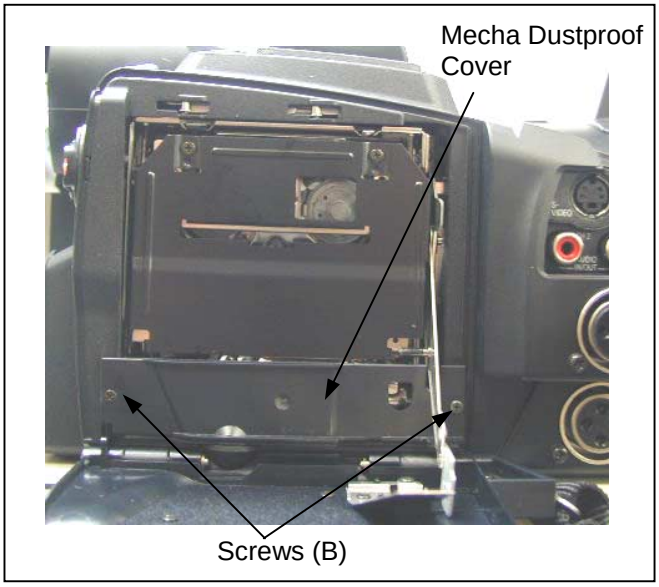
2. If there is curing or damage at the ether guide of posts, readjust the height of the posts by turning the post with the Post Adjustment Driver.

1-5. Confirmation of the Envelope

To adjust envelope waveform, below indicated operation is required.

1. Remove the rubber on Grip Cover Unit.
2. Unscrew the screw (A) and remove the plate from frame.
3. Unscrew the 2 screws (B) and remove the Mecha Dustproof Cover.





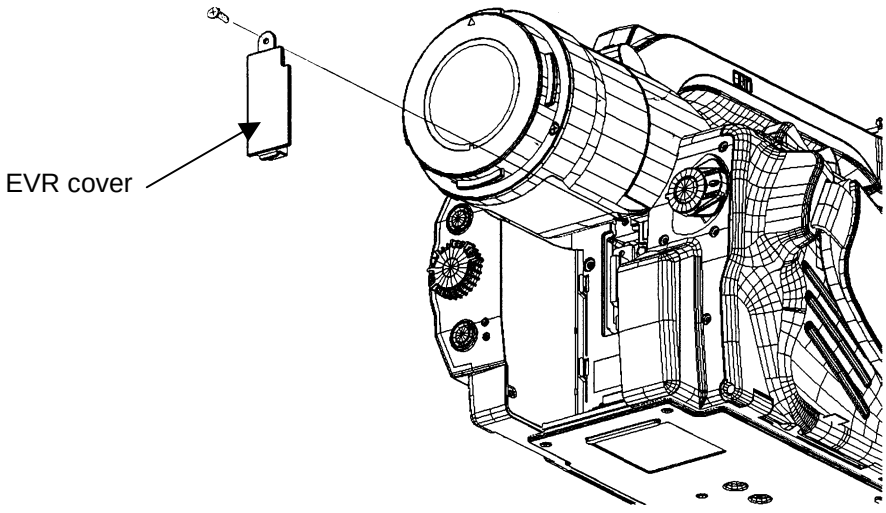
To confirm the envelope output, connect the Connection and Measuring Boards as described below.

For performing the confirmation of envelope, the following tool are required.

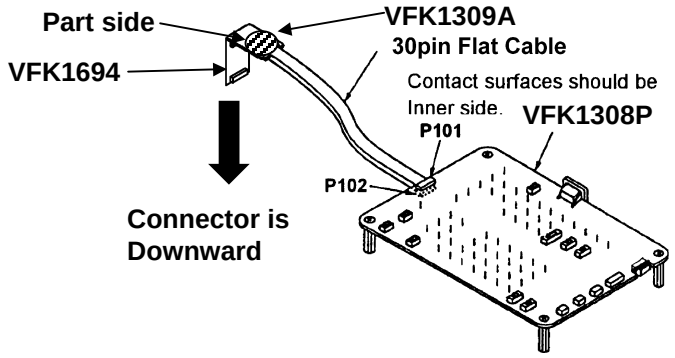
NAME	Part Number	Pcs.	Remark
Measuring Board	VFK1308P	1	
EVR Connector Board	VFK1309A	1	NOTE
EVR Extender Board	VFK1694	1	
30pin Flat Cable	VFK1317	2	
DC Cable	VJA0941	1	
AC Adaptor	-----		

NOTE: VFK1309 can be use to this confirmation and VFK1309A is only required LCD adjustment.

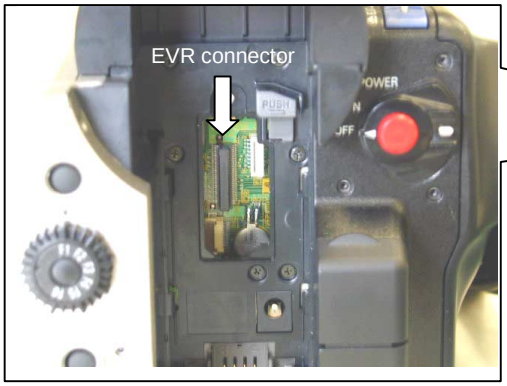
1. Unscrew 1 screw and remove the EVR cover.

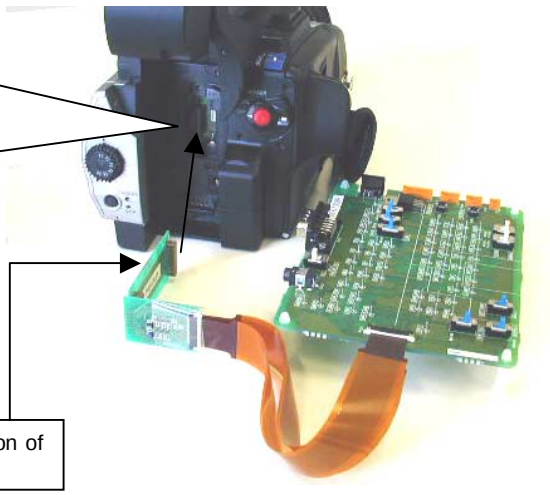


2. Connect the 2 pcs. of 30 pin flat cables(VFK1317) between P101/P102 on the Measuring Board(VFK1308P), and 2 connectors on the EVR Connector Board(VFK1309). Make sure that the contact surface of 2 pcs. of 30 pin Flat Cables are inner side and direction of the EVR Connector Board is as shown in Figure. Then connect the Extender board(VFK1694).



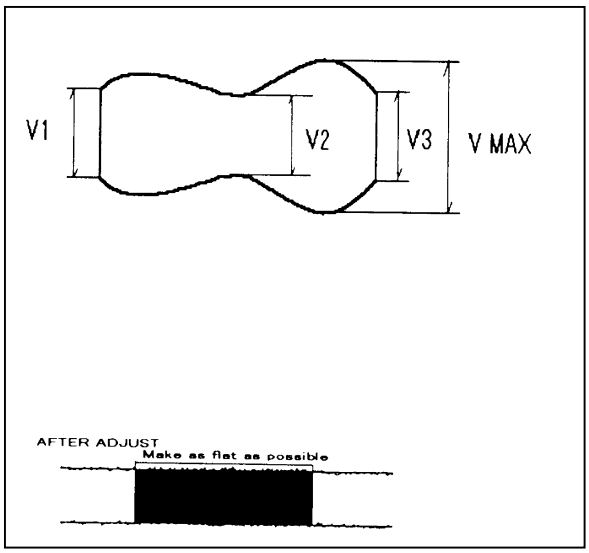
3. Connect the EVR Extender board (VFK1694) to EVR connector on EVR connect C.B.A in AG-DVX100. Then make sure that the direction of the Extender Board is correct as shown in Figure.





When the VFK1694 connect to EVR connector, be careful direction of VFK1694. Please follow as shown in the figure.

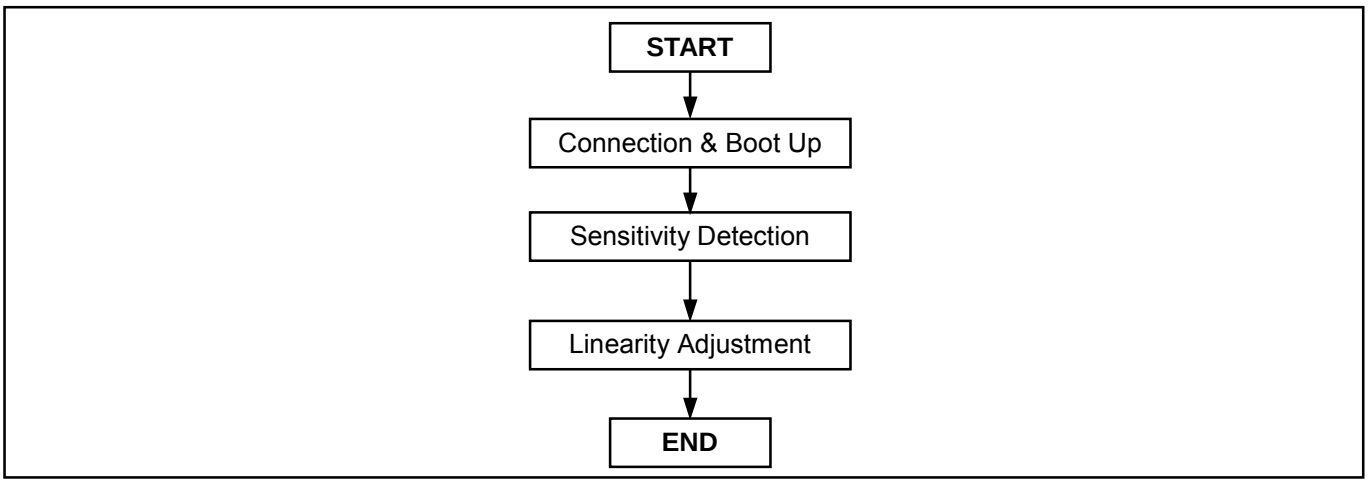
4. Supply DC6V to the Measuring Board (VFK1308P). Please use the DC cable (VJA0941) and AC Adaptor to supply DC voltage to Measuring Board.
5. Connect the oscilloscope to the Measuring Points [ENVELOPE] and [HID] as a trigger on the Measuring Board(VFK1308P).
6. Play back the color bar alignment tape and confirm that the Envelope is within the following specifications.



V1/V max. 0.9
V2/V max. 0.9
V3/V max. 0.9

7. If it is out of the specification, adjust the height of the S1 and T1 Post.

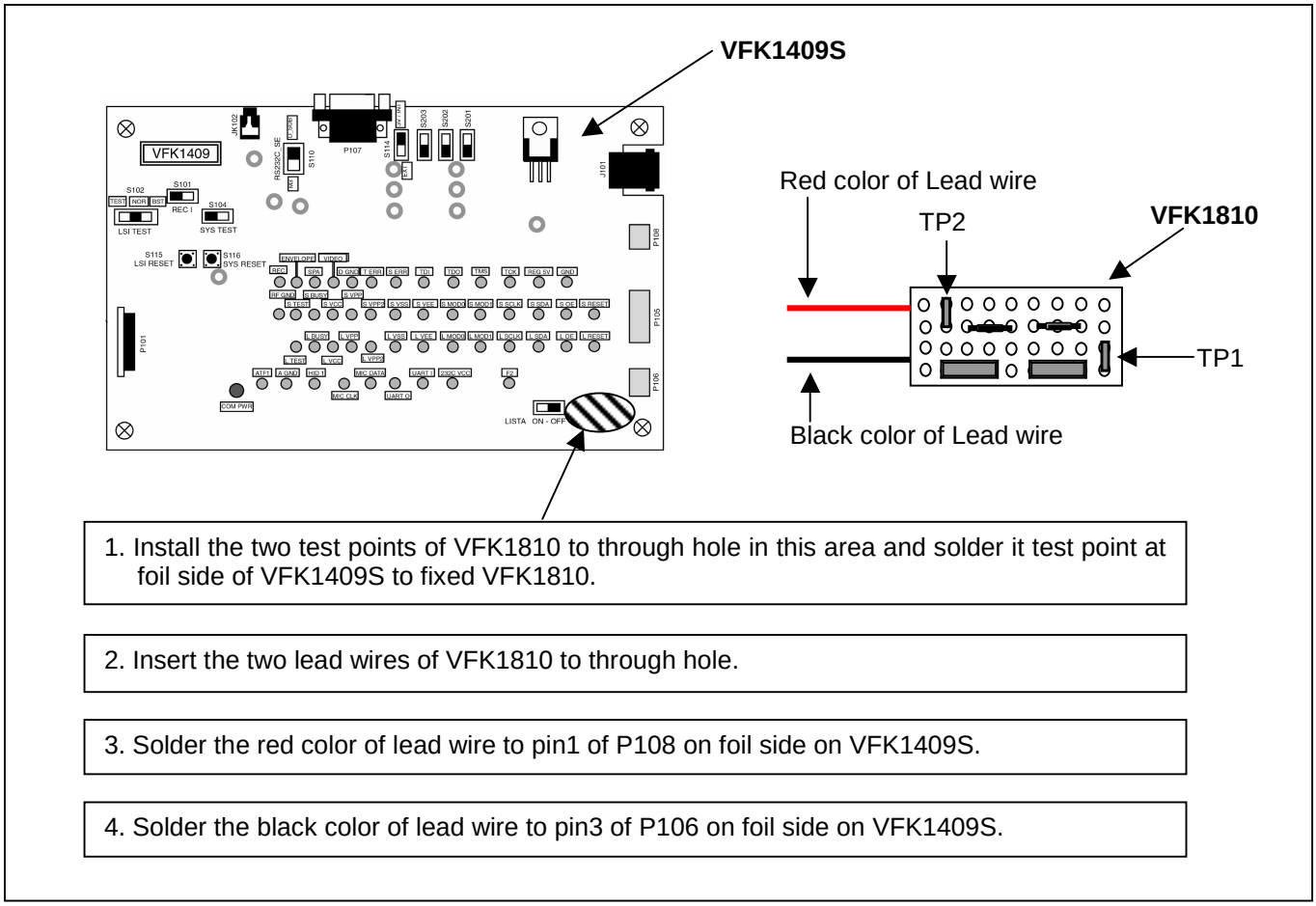
1-6. LISTA Adjustment Procedures



1-6-1. Connection of LISTA Adjustment system

TAPE	VFM3000EDS (DV LISTA)
M. EQ	Personal Computer (A/D Board should be installed.)
TOOL	VFK1481E (LISTA Software), VFK1186 (LISTA Cable), VFK1300 (A/D Converter Board), VFK1308P (Measuring Board), VFK1409A (Measuring Board) ← **NOTE 2** VFK1317 (30P flat cable): 2pcs, VFK1309A (EVR connector board) ← **NOTE 1** VFK1694 (EVR extender board), VJA0941(DC cable): 2pcs, 9P RS232C cross cable.
TP	In case of use VFK1409A **F2** : ATF-ERR (VFK1409A), **TP2** : TRG/HSW (VFK1409A), **GND** : GND (VFK1409A) In case of use VFK1409S **F2** : ATF-ERR (VFK1409S), **TP2** : TRG/HSW (VFK1810), **GND** : GND (VFK1409S)

NOTE 1:
VFK1309 and VFK1309A can be use to perform LISTA adjustment. The VFK1309A is only required LCD adjustment(refer to item 1 of Electrical adjustment procedure in section 4.)
NOTE 2:
If you already have VFK1409S(Measuring board), it can be use to perform LISTA adjustment with VFK1810(LISTA Measuring board).
How to install the VFK1810 to VFK1409S, please refer to next explanation.


VFK1409S
VFK1409
Red color of Lead wire
TP2
VFK1810
TP1
Black color of Lead wire
1. Install the two test points of VFK1810 to through hole in this area and solder it test point at foil side of VFK1409S to fixed VFK1810.
2. Insert the two lead wires of VFK1810 to through hole.
3. Solder the red color of lead wire to pin1 of P108 on foil side on VFK1409S.
4. Solder the black color of lead wire to pin3 of P106 on foil side on VFK1409S.

1. Set the switches on the Measuring Board as shown below.

<VFK1308P>

SW NAME& No.	Setting Position
RS232C SEL(SW101)	D-SUB
VTR TEST(SW103)	L
BST TEST(SW104)	NORMAL
SW105	H
SW106	OFF
SW107	CENTER position
SW108	H
FLUSH1 (SW102)	NORMAL
FLUSH2 (SW109)	NORMAL

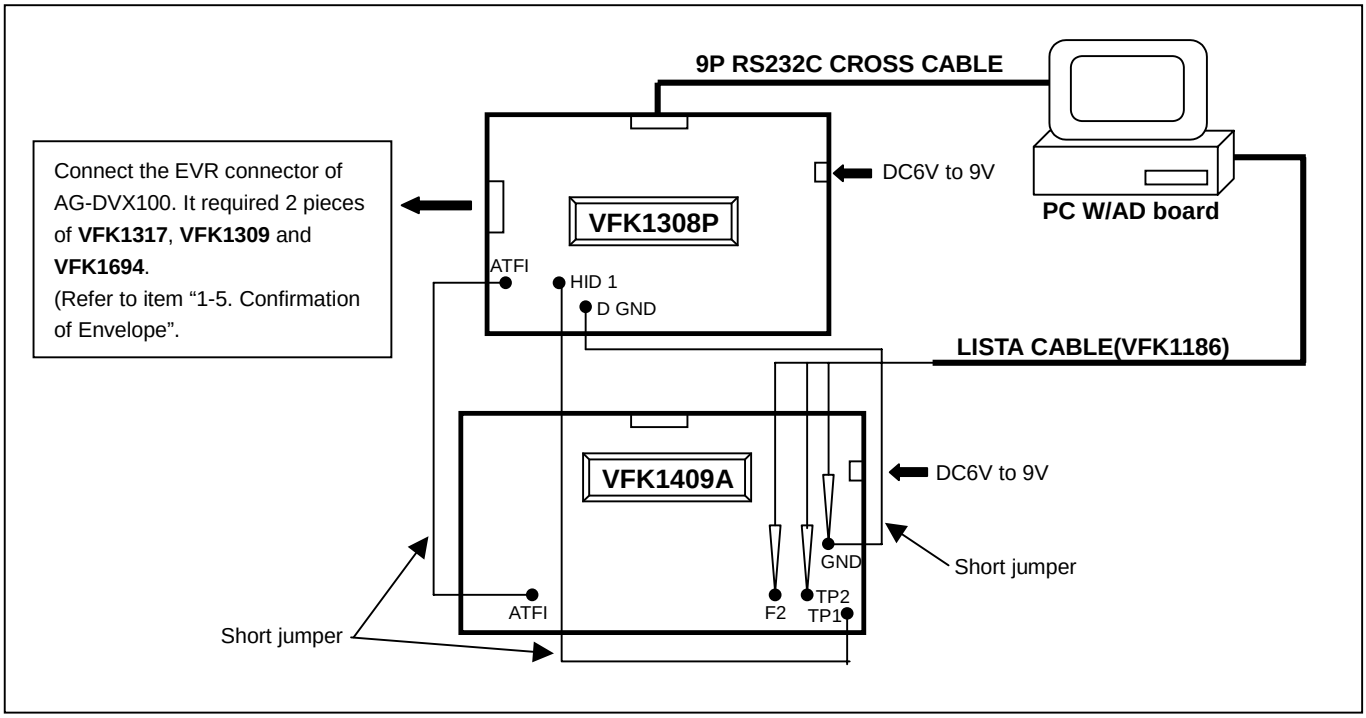
<VFK1409S or VFK1409A>

SW NAME& No.	Setting Position
RS232C SEL (S110)	D-SUB
REC I (S101)	NOR
LSI TEST(S102)	NOR
S104	NOR
S114	EXT
S201	Right side
S202	Right side
S203	Right side
LISTA ON-OFF	ON

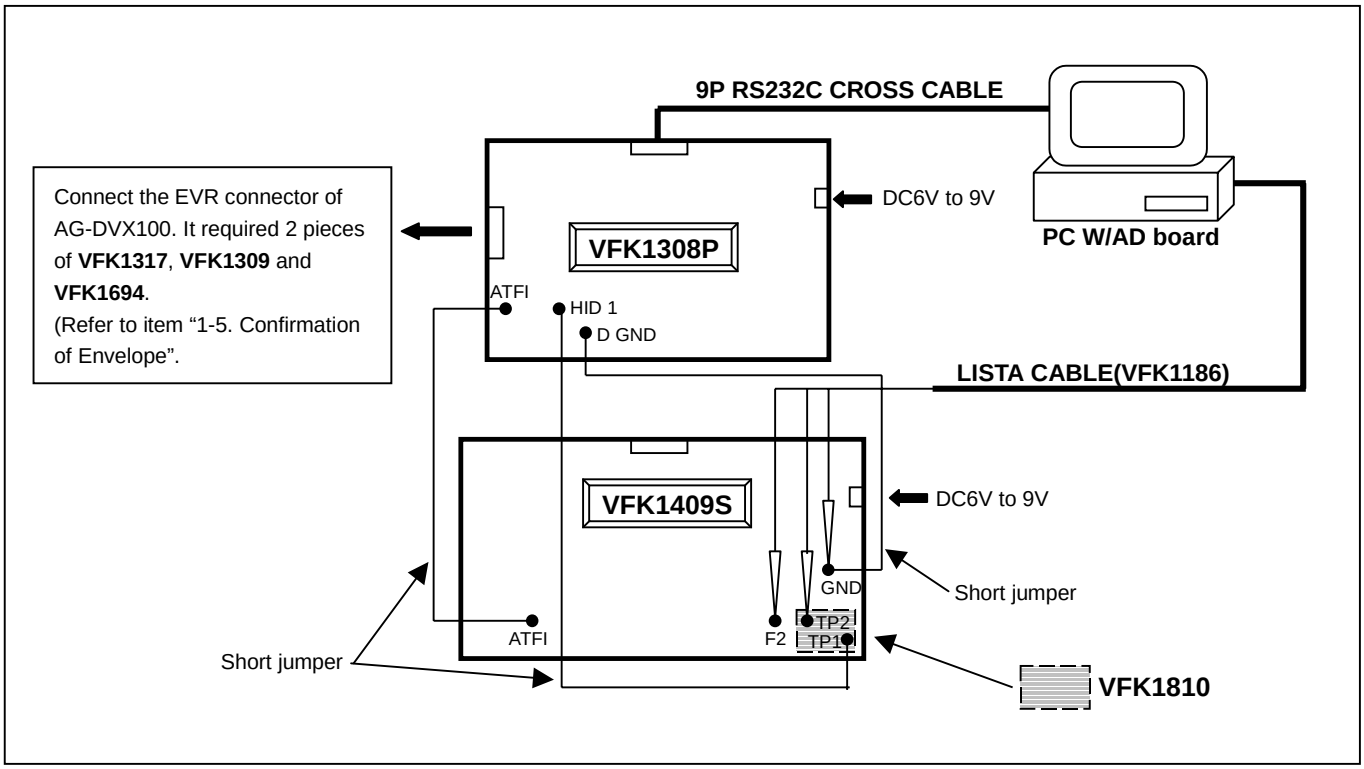
2. Connect a PC, the Measuring Board and the AG-DVX100 as shown below.

<CONNECTION>

1) In case of use VFK1409A



2) In case of use VFK1409S



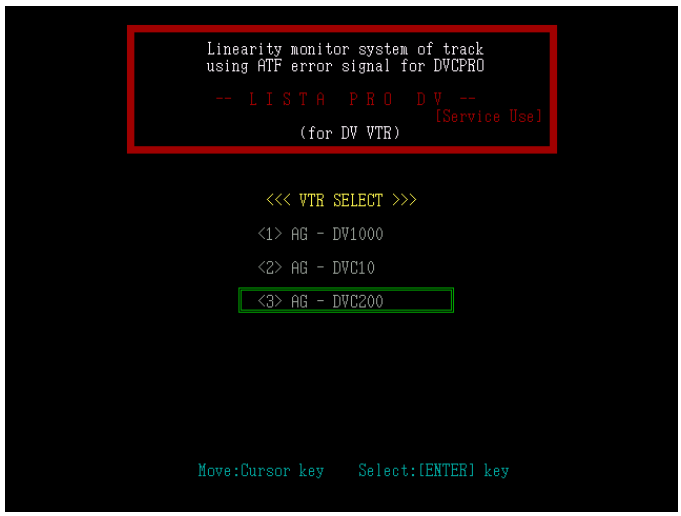
3. Connect the clips of the LISTA cable to test point on the Measuring Board. (Refer to Items **"Sensitivity Detection"** and **"Linearity Adjustment"**.)

1-6-2. Boot up the LISTA software

1. Boot up the LISTA software on DOS mode.

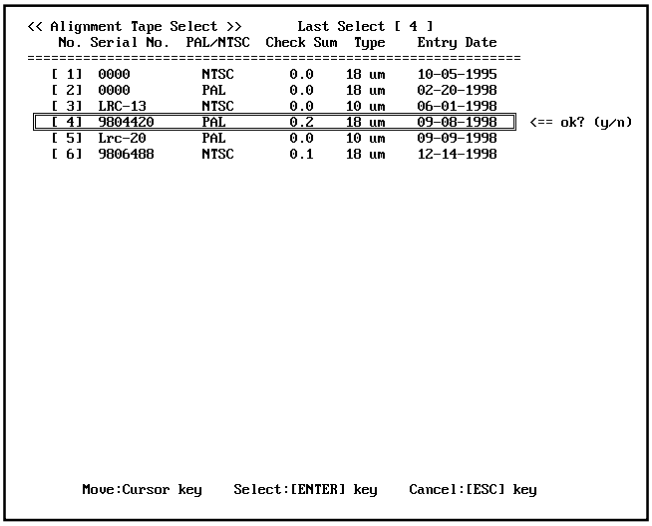
> **< How to Installation and Boot Up >**
> All files on the floppy disk (VFK1481E : LISTA Software) copy to created directly on PC (**i.e.;** C:¥LISTA).
> Type **"LISTA"** and press **ENTER** key, then boot up the LISTA software VFK1481E.

2. After boot up the LISTA software, **<<< FORMAT SELECT >>>** display appeared. Select the item **"DV"**. After select the format, **<<< VTR SELECT >>>** display ppeared, and select the model **"AG-DVC200"**.

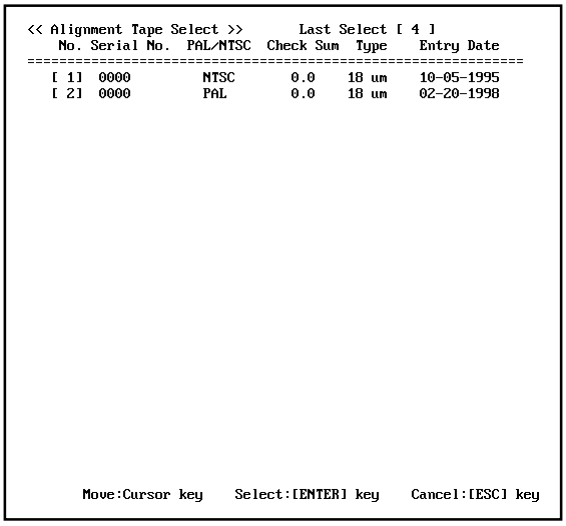


3. Next, select the Serial number of the Alignment tape on the screen. In case of LISTA software have not resisted data of alignment tape, press the ESC key, then main menu is display on the screen. And select the item **"<4> Alignment Tape"** for entry the data on the attachment sheet, which is enclosed of alignment tape.
4. In case of LISTA software have resisted data of alignment tape, select the serial number of Alignment tape, then appear message **"ok?(y/n)"** on the screen. And press **" Y "** or **" ENTER "** key, then LISTA main menu is display on screen.

< In case of Alignment Tape resisted already >



< In case of Alignment Tape does not resisted >



1-6-3. How to Entry the Alignment Tape Data

1. Select the item **"<4> Alignment Tape"** on the LISTA main menu.
2. Select the item **"<2> ENTRY"** on the alignment menu.
3. After display the screen of **<<Alignment Tape Data Entry>>**, first input the Serial Number follow the printed number on the tape label. And input the number **"0"** or **"1"** for selected the PAL/NTSC. And after that for entry the tape type, incase of DVCPRO input to **"0"**, in case of DV input to **"1"**.
4. After select the tape type, the frame for input the DATA and CHECK SUM appeared on the screen. Input the numerical value in numerical order on the data sheet, which are enclosed with alignment tape. If input the wrong number, appear the error message on the screen, then confirm that the data on the sheet.
5. After entry the data, select **"<1> SELECT"** on the Alignment Tape Menu and select the serial number of the alignment tape.

<< Alignment Tape Data Entry >> **Serial No. 0596003 (NTSC) 10μm**

[1]	- 0.1
[2]	0.1
[3]	0.0
[4]	0.2
[5]	0.6
[6]	0.5
[7]	0.7
[8]	0.9
[9]	1.0
[10]	0.8

[11]	0.7
[12]	1.0
[13]	0.7
[14]	0.5
[15]	0.2
[16]	- 0.5
[17]	- 0.3
[18]	- 0.3
[19]	- 0.1
[20]	- 0.6

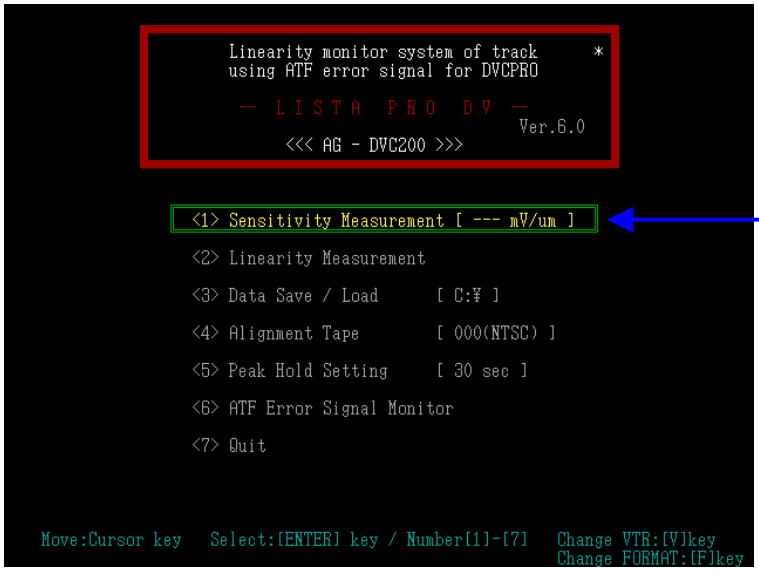
[21]	- 0.4
[22]	- 0.2
[23]	- 0.7
[24]	- 0.6
[25]	- 0.7
[26]	- 0.3
[27]	- 0.4
[28]	- 0.4
[29]	- 0.6
[30]	- 0.3

[31]	- 0.4
[32]	- 0.6
[33]	- 0.3
[34]	- 0.2
[35]	- 0.1
[36]	- 0.3
[37]	- 0.1

[CS]	- 0.6

1-6-4. LISTA Sensitivity Detection

TP	In case of use VFK1409A **F2** : ATF-ERR (VFK1409A), **TP2** : TRG/HSW (VFK1409A), **GND** : GND (VFK1409A) In case of use VFK1409S **F2** : ATF-ERR (VFK1409S), **TP2** : TRG/HSW (VFK1810), **GND** : GND (VFK1409S)
VTR MODE	PLAY
ADJ. MODE	Refer to below explanation
TAPE	VFM3000EDS (DV LISTA)
SPEC.	40 mV / μm to 120 mV / μm


Linearity monitor system of track *
using ATF error signal for DVCPRO
-- LISTA PRO DV --
Ver.6.0
<<< AG - DVC200 >>>
<1> Sensitivity Measurement [--- mV/um]
<2> Linearity Measurement
<3> Data Save / Load [C:¥]
<4> Alignment Tape [000(NTSC)]
<5> Peak Hold Setting [30 sec]
<6> ATF Error Signal Monitor
<7> Quit
Move:Cursor key Select:[ENTER] key / Number[1]-[7] Change VTR:[V]key
Change FORMAT:[F]key

Select at Sensitivity Detection.

1. Set the AG-DVX100 to VCR mode.
2. Insert the DV Alignment Tape (VFM3000EDS) to the AG-DVX100.
3. Press MENU button while pressing ADUB and REW button at the same time, then open the VCR FUNCTION menu.
4. Open the “7. ADJUST MENU” in VCR FUNCTION menu.
5. Select the item “ATF GAIN” and set to ON in ADJUST MENU.
6. Message “NOW SERVO ADJUST PUSH MENU TO RETURN” is appeared on screen.
   Press ► key to playback the tape.
7. Press MENU button to return ADJUST MENU screen.
8. Select item "<1> Sensitivity Measurement " on the LISTA main menu, and press "ENTER".
9. Then the tape is played back (tape speed : 101.2%) automatically, and message “1.2% Speed…” appears an the screen.
10. Press the ENTER key, and then start measurement of the sensitivity value.
11. Confirm that the sensitivity value is with in specification, when the message “<<Sensitivity Measurement Finish>>.

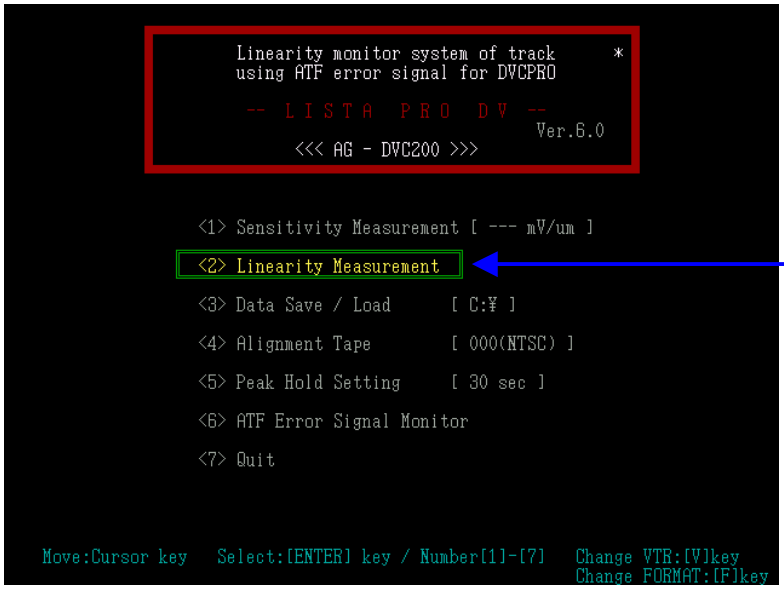
<<Sensitivity Measurement Finish>>

Sensitivity **72.95 (mV/um)**
Sens.1 ~~85.43 (mV/um)~~
Sens.1 85.48 (mV/um)

Confirm that the value of Sens.Value1 and Sens.Value2 in specification

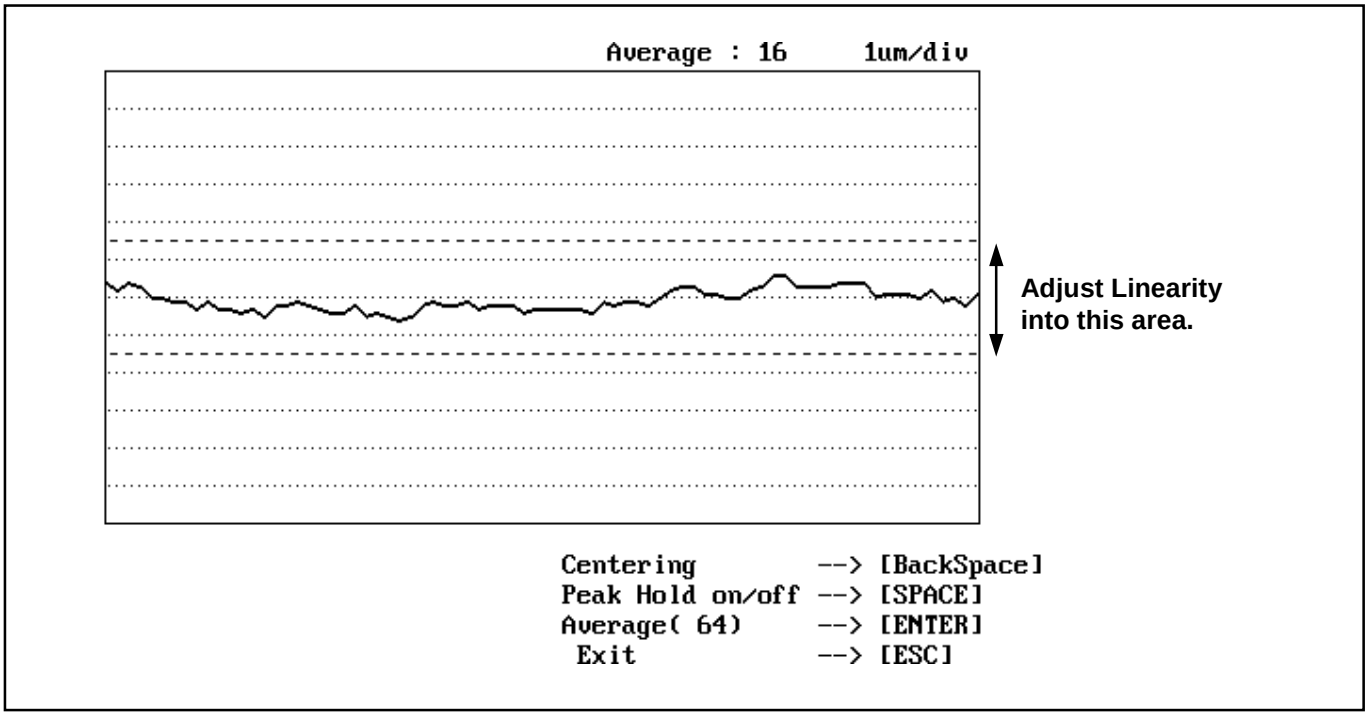
1-6-5. LISTA Linearity Adjustment

TP	In case of use VFK1409A **F2** : ATF-ERR (VFK1409A), **TP2** : TRG/HSW (VFK1409A), **GND** : GND (VFK1409A) In case of use VFK1409S **F2** : ATF-ERR (VFK1409S), **TP2** : TRG/HSW (VFK1810), **GND** : GND (VFK1409S)
ADJ.	S1 and T1 Post Height
VTR MODE	PLAY
ADJ. MODE	Refer to below explanation
TAPE	VFM3000EDS (DV LISTA)
TOOL	VFK1149A : Post Driver
SPEC.	Linearity : less than 3μm


Linearity monitor system of track *
using ATF error signal for DVCPRO
-- LISTA PRO DV --
Ver.6.0
<<< AG - DVC200 >>>
<1> Sensitivity Measurement [--- mV/um]
<2> Linearity Measurement
<3> Data Save / Load [C:¥]
<4> Alignment Tape [000(NTSC)]
<5> Peak Hold Setting [30 sec]
<6> ATF Error Signal Monitor
<7> Quit
Move:Cursor key Select:[ENTER] key / Number[1]-[7] Change VTR:[V]key
Change FORMAT:[F]key

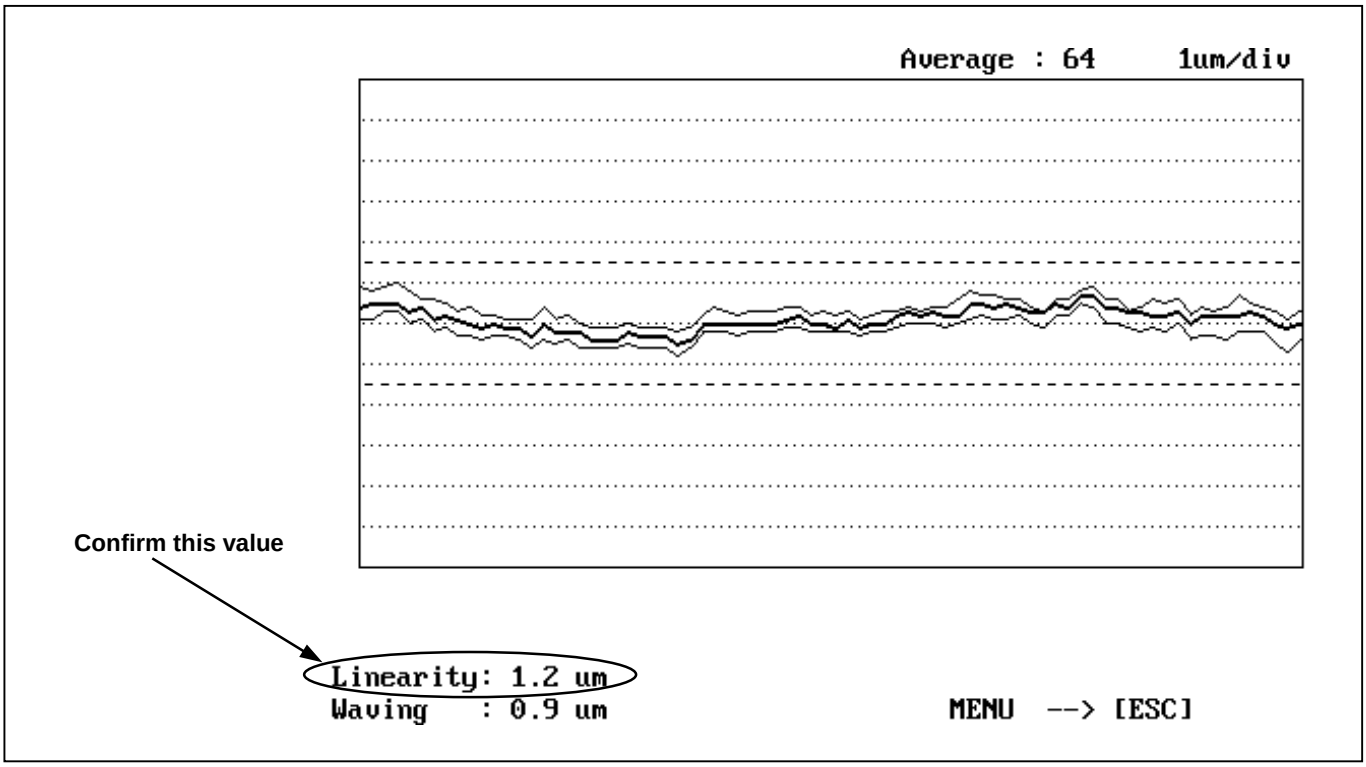
Select at Linearity Measurement.

1. Set the AG-DVX100 to VCR mode.
2. Insert the DV Alignment Tape (VFM3000EDS) to the AG-DVX100.
3. Press MENU button while pressing ADUB and REW button at the same time, then open the VCR FUNCTION menu.
4. Open the “7. ADJUST MENU” in VCR FUNCTION menu.
5. Select the item “LINEARITY” and set to ON in ADJUST MENU.
6. Message “NOW SERVO ADJUST PUSH MENU TO RETURN” is appeared on screen.
   Press ► key to playback the tape.
7. Press MENU button to return ADJUST MENU screen.
8. Select item "<2> Linearity Measurement " on the LISTA main menu, and press "ENTER", then appeared Linearity Waveform.
9. When the waveform as shown below figure is displayed on the screen, press the **”BS (Back Space)”** key for display the waveform positioned at the center of the scale on screen. Adjust S1 and T1 post height by using the post driver so that the linearity waveform is become flat as possible, and it should be within specification. (Adjust linearity waveform in the red dot line on the screen.)



POINT :
The part of left side of waveform (entrance side) is adjusted by height of S1 post and part of right side of waveform (exit side) is adjusted by height of T1 post.
Lower part of above waveform of figure is displayed lead of Cylinder.
When the post driver is remove from upper part of post, linearity waveform is changed.
After finish this adjustment, eject the tape and insert the tape again for confirm the shape of linearity waveform does not changed.

8. Press “SPACE” key to perform the Peak Hold in 30 seconds when linearity is displayed.
9. After finish the Peak Hold, press “SHIFT” and “ } ” key simultaneously on the Key Board, then the numerical values of “Linearity” and “Waving” is displayed on left lower portion of screen. And confirm the numerical value of “Linearity” is in the specification. If the “Linearity” is out of specification adjust height of S1 and T1 post.
10. After this measurement is finished, press the ESC key to return to the main menu.



2. MECHANICAL PARTS REPLACEMENT PROCEDURE

2-1. Disassembly Flowchart

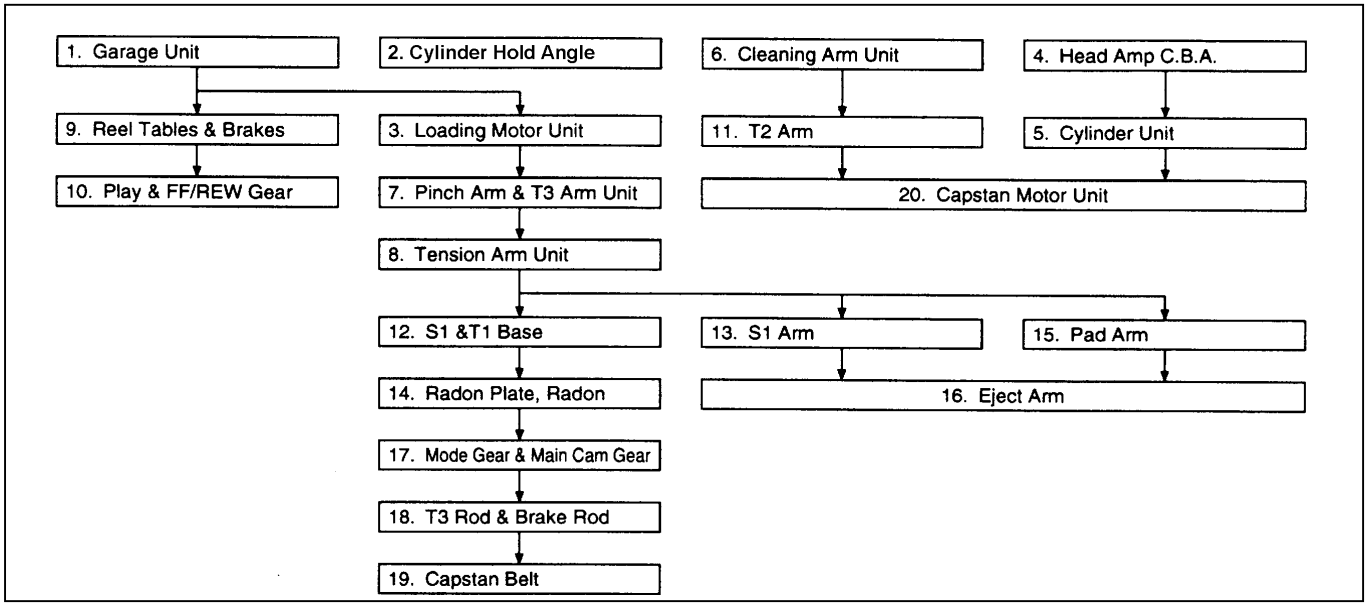

1. Garage Unit
2. Cylinder Hold Angle
6. Cleaning Arm Unit
4. Head Amp C.B.A.
9. Reel Tables & Brakes
3. Loading Motor Unit
11. T2 Arm
5. Cylinder Unit
10. Play & FF/REW Gear
7. Pinch Arm & T3 Arm Unit
20. Capstan Motor Unit
8. Tension Arm Unit
12. S1 &T1 Base
13. S1 Arm
15. Pad Arm
14. Radon Plate, Radon
16. Eject Arm
17. Mode Gear & Main Cam Gear
18. T3 Rod & Brake Rod
19. Capstan Belt

Figure 2-1-1

2-2. Manual Loading / Unloading

For the mechanism maintenance, loading and unloading operation can be manually performed.
In order to perform manual loading and unloading easily, use Gear Driver (VFK1266) as shown in Figure 2-2-1.

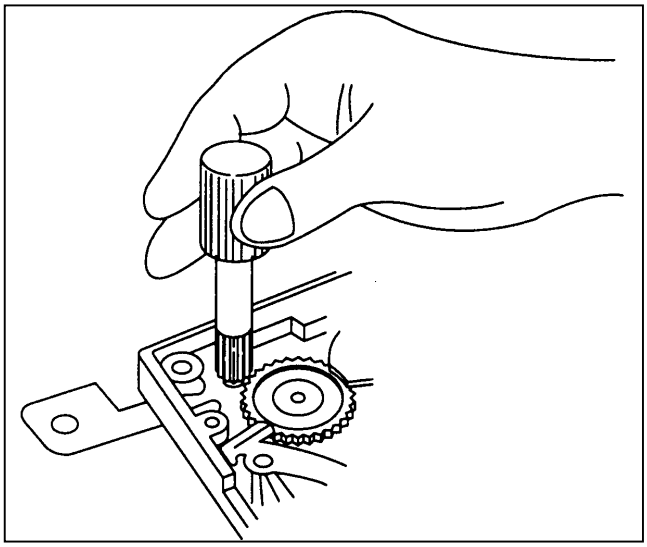


Figure 2-2-1

Rotate the Gear Driver clockwise or counterclockwise so that the Mode Cam Gear rotates opposite direction of the Gear Driver rotation, and then loading and unloading are performed

2-3. Disassembly Procedures

2-3-1. Garage Unit

1. Slide the Lock Lever with tweezers to eject the Garage.

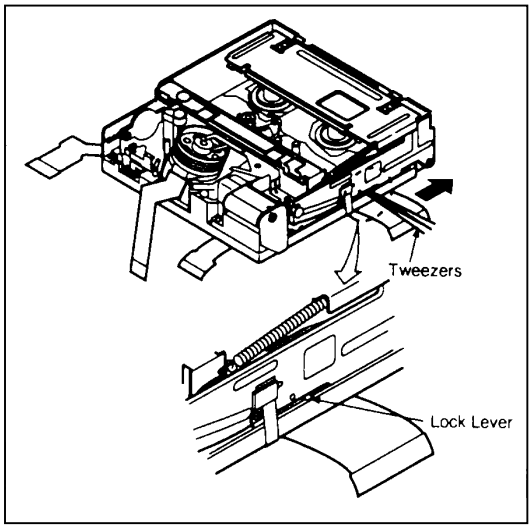


Figure 2-3-1

(Manual Eject)

Unscrew 2 screws (A) and removes Supply and Take-up Photo Transistors from Garage Unit. Unscrew 4 screws (B) and remove the Garage Unit.

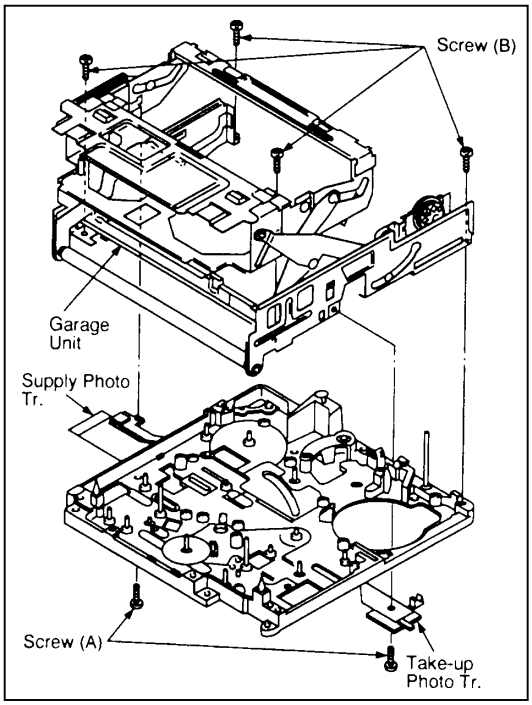


Figure 2-3-2

2-3-2. Cylinder Hold Angle

1. Unscrew 2 screws (C) and remove the Earth Brush.

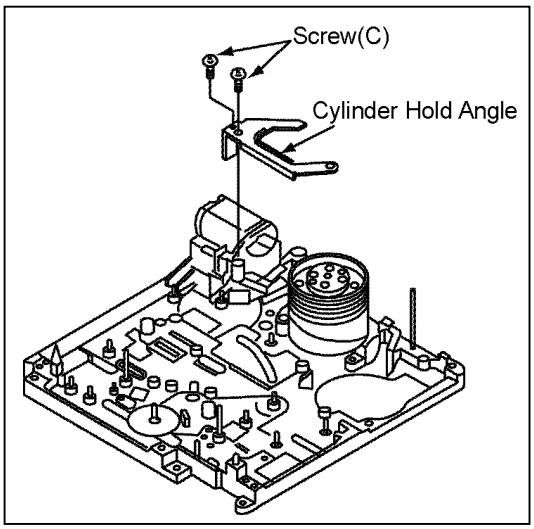


Figure 2-3-3

(Note of installation)

Install the Cylinder Hold Angle so that the tip of Angle is located in the P.C.Board.

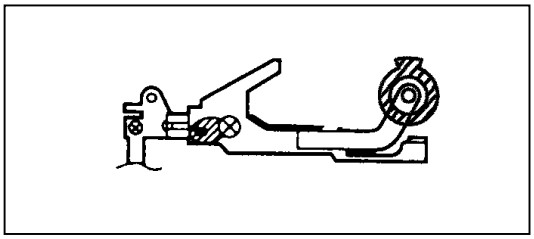


Figure 2-3-4

2-3-3. Loading Motor Unit

1. Unsolder the soldered portion (D). Unscrew 2 screws (E) and remove the Loading Motor Unit.

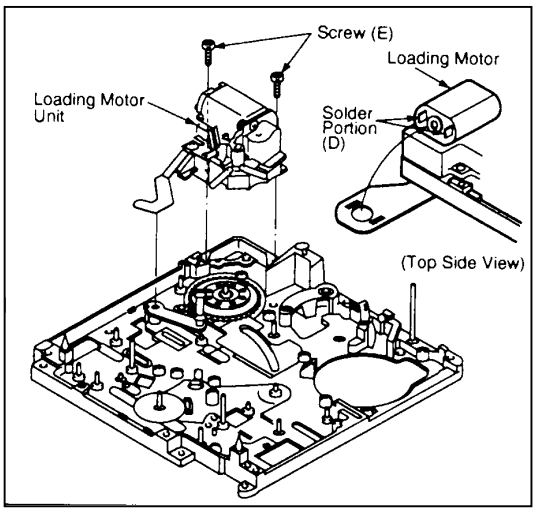


Figure 2-3-5

2-3-4. Head Amp C.B.A.

1 Unscrew screw (F) and remove the Capstan Cover. Disconnect FP5001.Disconnect Unscrew 2 screws (G) and remove the Head Amp C.B.A.

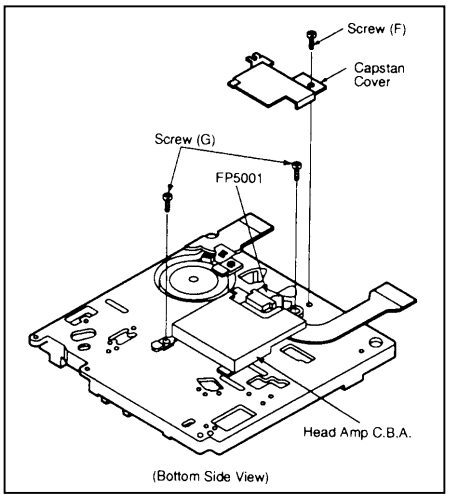


Figure 2-3-6

2-3-5. Cylinder Unit

1. Unscrew 3 screws (H) and remove the Cylinder Unit carefully. Do not touch the Video Head.

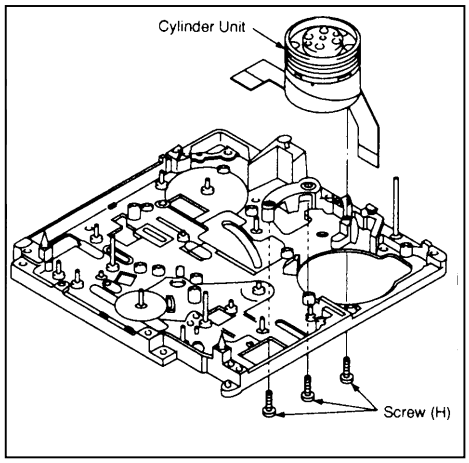


Figure 2-3-7

2-3-6. Cleaning Arm Unit

1. Unlock the locking portion of the Cleaning Arm Unit

(Note of installation)

Hooking portion of the Cleaning Arm Spring is;
Spring (a) -- Cleaning Arm spring (a')
Spring (b) -- T2 Arm Unit (b')

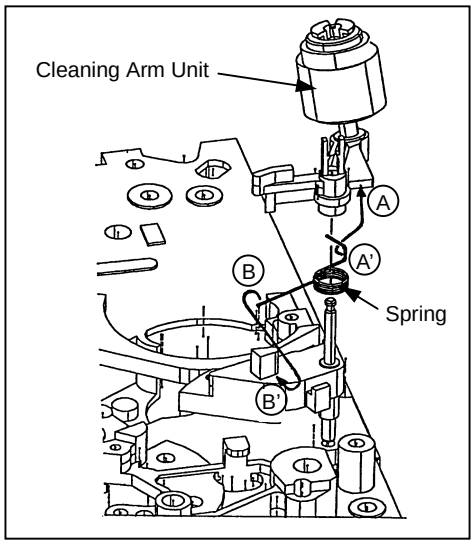


Figure 2-3-8

2-3-7. Pinch Arm & unlock T3

1. Unscrew screw (I), then slide the Pinch Pressure Plate and unlock the locking portion.

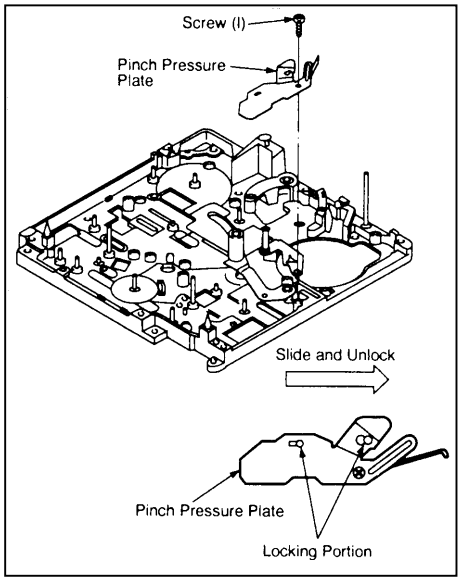


Figure 2-3-9

(Note of installation)
Remove the T3 Arm Unit.
After install T3 Arm Unit, the Height Adjustment is required.

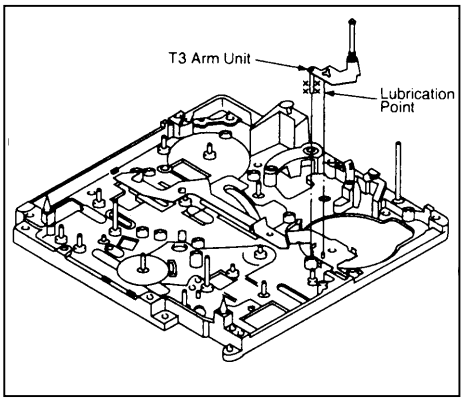


Figure 2-3-10

(Note of installation)
Remove the Pinch Arm Unit and Pinch Arm Spring.

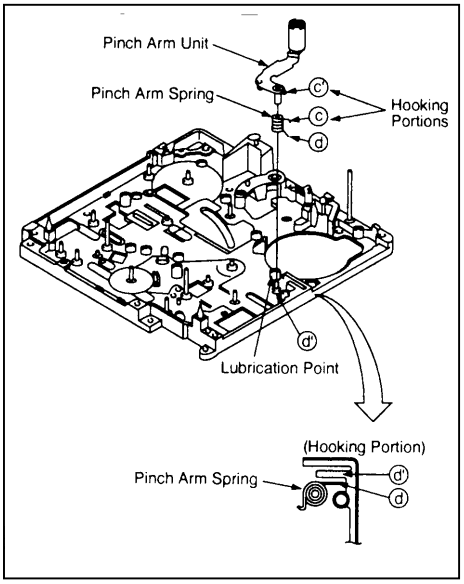


Figure 2-3-11

(Note of installation)
Hooking portion of the Pinch Arm Spring is;
Spring (c) -- Pinch Arm (c')
Spring (d) -- T3 Rod (d')

2-3-8. Tension Arm Unit

1. Turn the Mode Gear counter-clockwise until Tension Arm Unit slightly move to loading direction. Remove the Tension Arm Unit and Cut Washer (J).

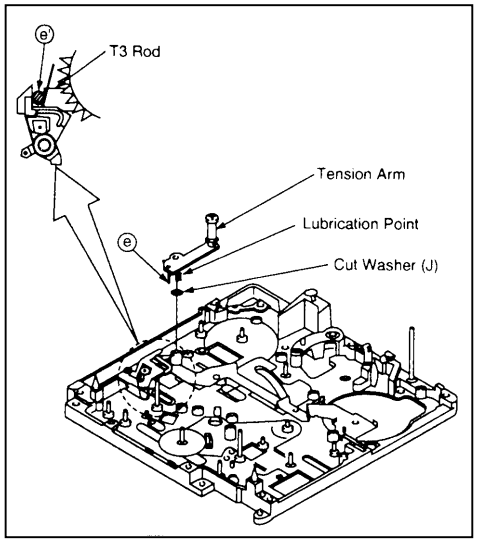


Figure 2-3-12

(Note of installation)
The projection (e) on Tension Arm meets guide (e') on the T3 Rod which is shifted by turning Mode Gear.

2-3-9. Reel Tables & Brakes

1. Unhook the hooking portion (f) and (f'). Unscrew 3 screws (K) and remove Cover Plate.

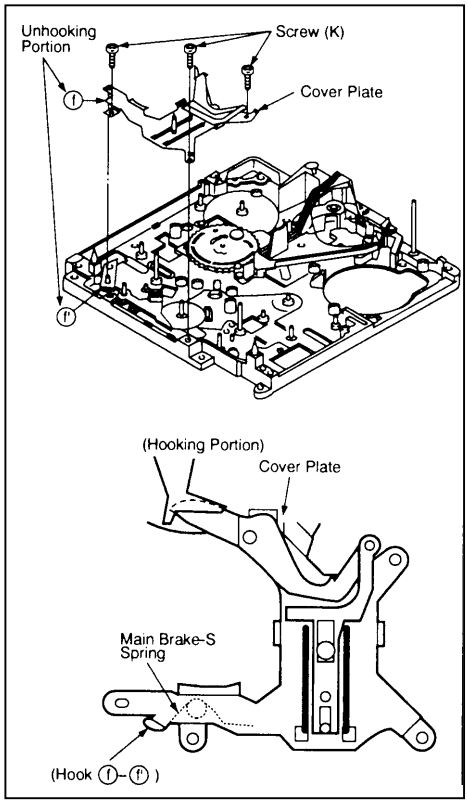


Figure 2-3-13

2. Remove Supply and Take-up Reel Tables.

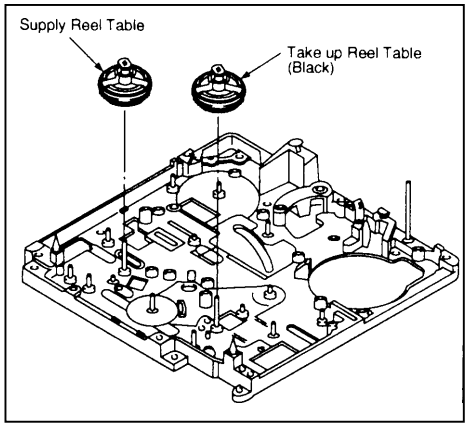


Figure 2-3-14

3. Unhook the hooking portion (g) and (g') of the Review Brake Spring and remove Review Brake.

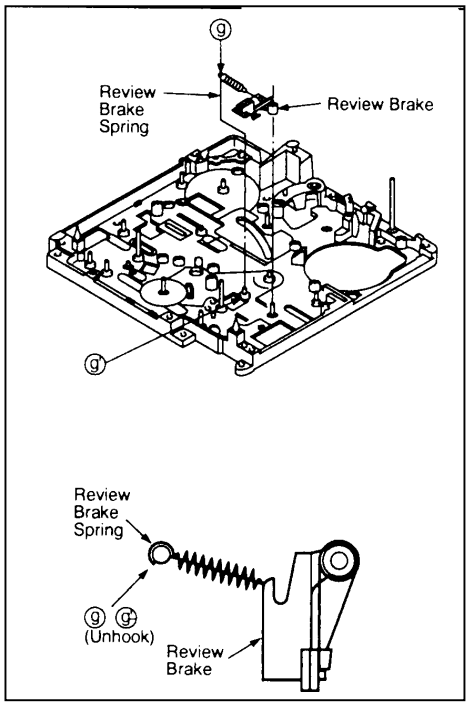


Figure 2-3-15

4. Remove the FF Brake and FF Brake Spring.

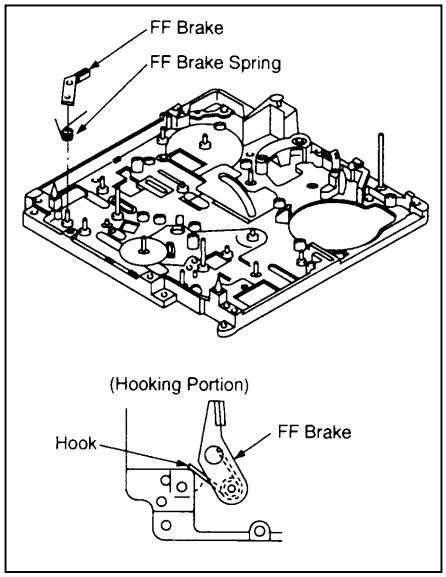


Figure 2-3-16

(Note of installation)
Confirm the hooking portion of the FF Brake Spring.

5. Remove the Main Brake S and Main Brake-S Spring.

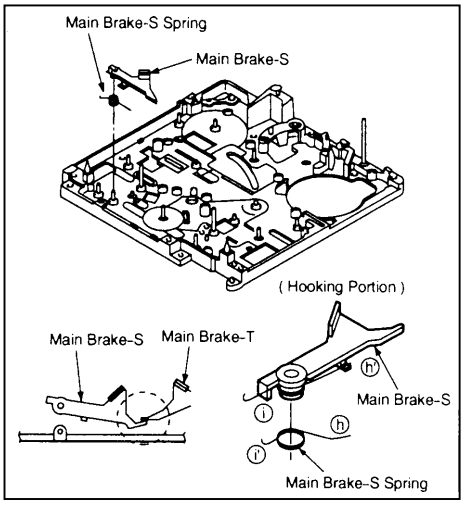


Figure 2-3-17

(Note of installation)
Confirm the hooking portion of the Main Brake-S Spring.

6. Remove the Cut Washer (L) and Main Brake T Unit.

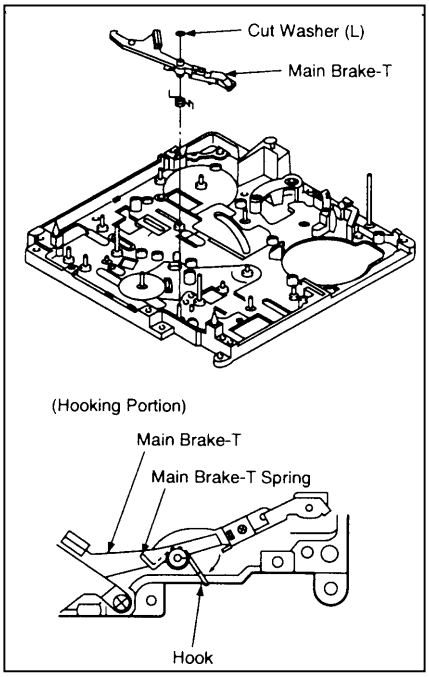


Figure 2-3-18

(Note of installation)
Confirm the hooking portion of the Main Brake T Spring.

2-3-10. Play & FF/REW Gear

1. Remove the Play Idler and Play Gear.

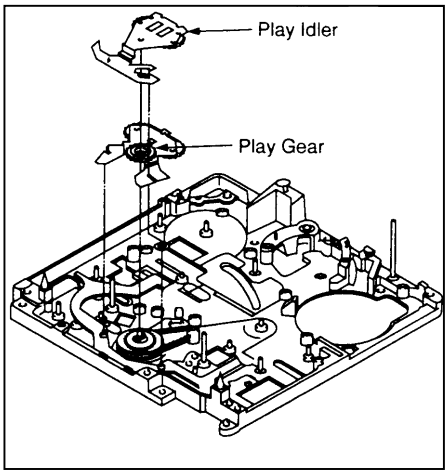


Figure 2-3-19

2-3-11. T2 Arm Unit

1. Remove the Cut Washer (M) and T2 Arm Unit with spring.

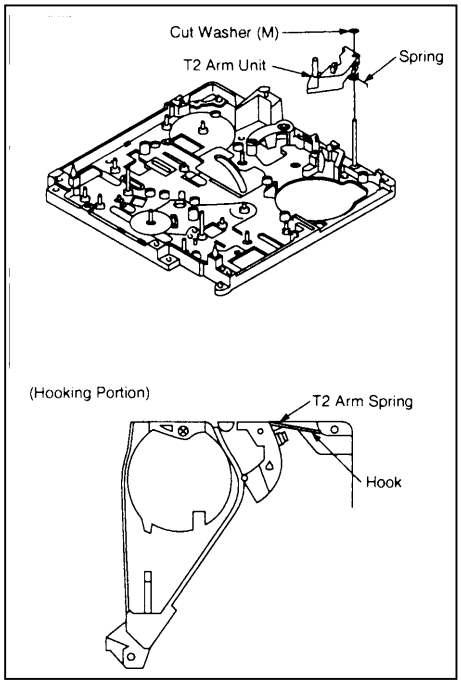


Figure 2-3-20

(Note of installation)
Confirm the hooking portion of the T2 Arm Spring.

2-3-12. S1 & T1 Base

1. Turn the Mode Gear counter-clockwise until half loading position. Hold (N) and (O) positions on S1 and T1 Arm units and then unlock the locking portions (A) and (B) with tweezers.

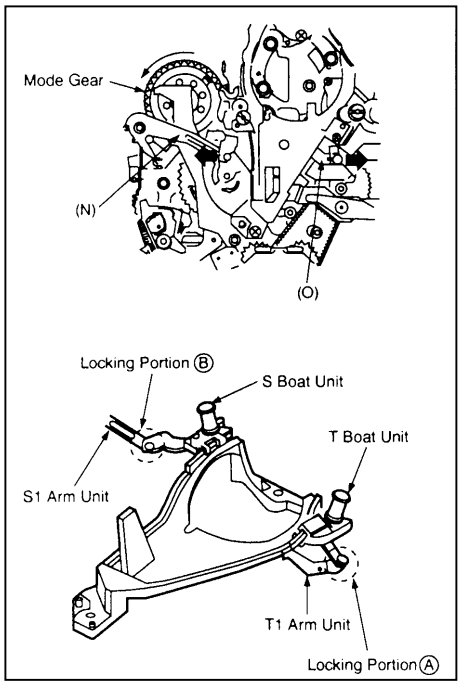


Figure 2-3-21

2. Remove 2 screws (P) and Cylinder Base Unit with S and T Boat Units. Then remove S and T Boat Units from the Cylinder Base Unit.

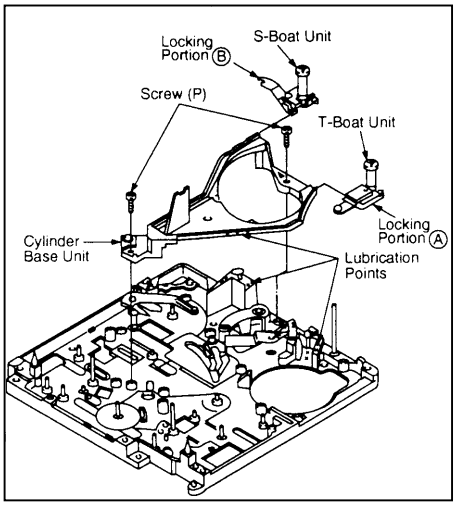


Figure 2-3-22

(Note of installation)
After install the Cylinder Base Unit move, S and T Boat to loading completed position by finger and turn the Mode Gear clockwise until half loading position. Then connect the locking portion (A) and (B).

2-3-13. S1 Arm

1. Turn the Mode Gear fully counter-clockwise. Remove the Cut Washer (Q) and S1 Arm Unit.

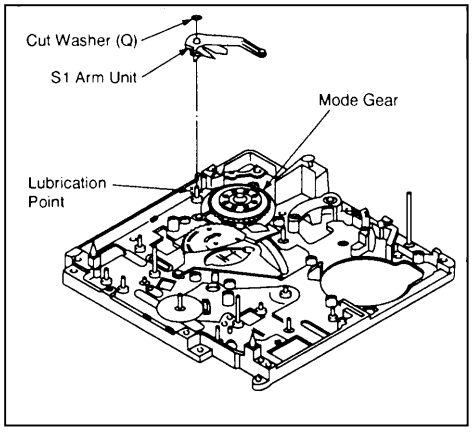


Figure 2-3-23

2-3-14. Radon Plate, Radon Arm & T1 Arm

1. Unscrew 2 screws (R) and remove Radon Plate.

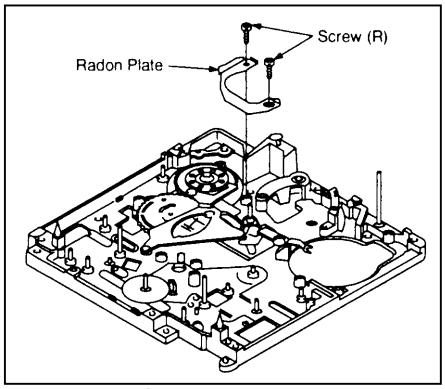


Figure 2-3-24

2. Unscrew screw (S) and remove Radon Arm Unit.

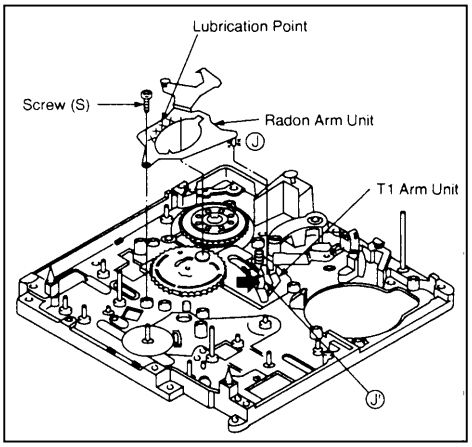


Figure 2-3-25

(Note of installation)
When installing the T1 Arm Unit, the projection (j) on the Radon Arm Unit is aligned to guide (j') on the T1 Arm Unit by pushing the T1 Arm Unit.

3. Remove the T1 Arm Unit.

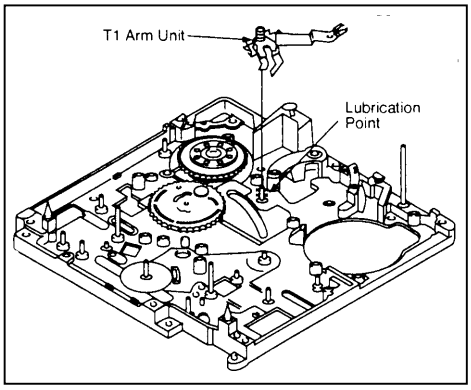


Figure 2-3-26

2-3-15. Pad Arm

1. Unhook the hooking portion (k') of the Pad Arm Spring. Remove the Cut Washer (T) and Pad Arm Unit.

(Note of installation)
Confirm the hooking portion of the Pad Arm Spring(k..k').

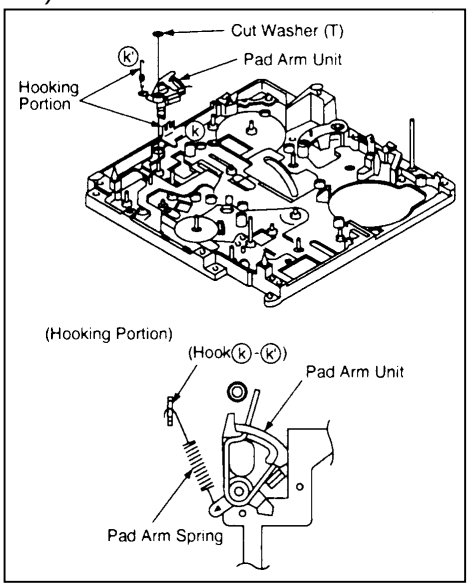


Figure 2-3-27

2-3-16. Eject Arm

1. Unscrew 2 screws(U) and remove the Eject Arm Unit.

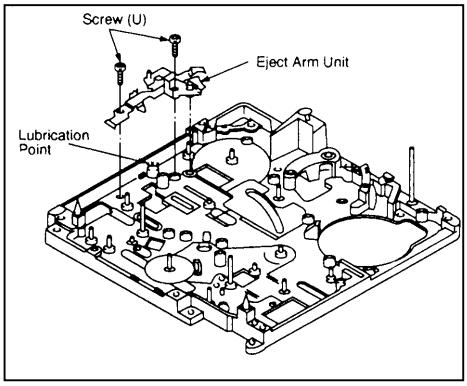


Figure 2-3-28

2-3-17. Mode Gear & Main Cam Gear

1. Remove the Main Cam Gear. Unsolder the soldered portion (l) on the Mechanism Flexible Board. Then remove the Mode Gear.

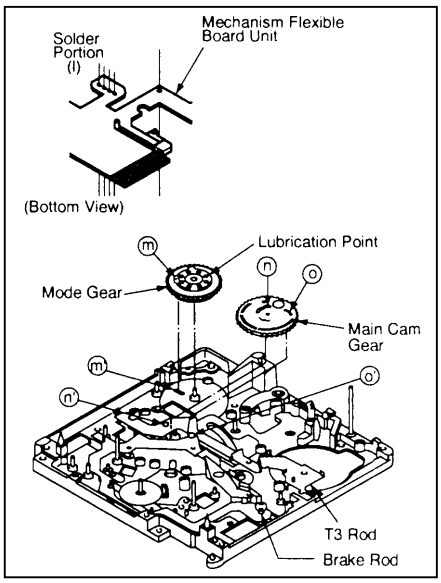


Figure 2-3-29

(Note of installation)
The projection (m) on the Mode Gear meets with the hole (m') on the Mechanism Chassis.
Push the Brake and T3 Rod in fully left direction.

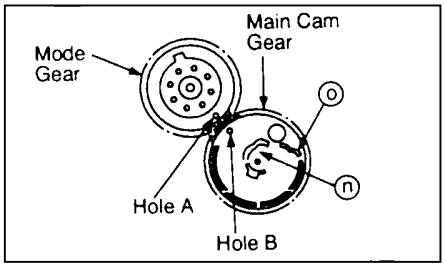


Figure 2-3-30

Install the Main Cam Gear so that the hole A on the Mode Gear is aligned to meet with the hole B on the Main Cam Gear.

Shift the T3 Rod slowly in the right direction until guide (n) on the Main Cam Gear meets with the projection (n') on the T3 Rod.
Shift the Brake Rod slowly in the right direction until guide (o) on the Main Cam Gear meets with the projection (o')on the brake Rod.

2-3-18. T3 Rod & Brake Rod

1. Remove the T3 Rod. The projection (p) and (q) on the T3 Rod meet with the guide (p') and (q') on the Mechanism Chassis.

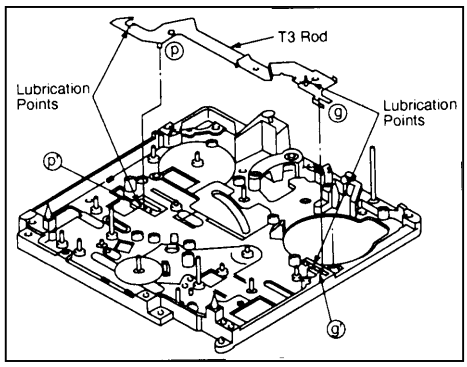


Figure 2-3-31

2. Unscrew 2 screws (V) and remove the Brake Rod, Brake Rod Plate A and B.

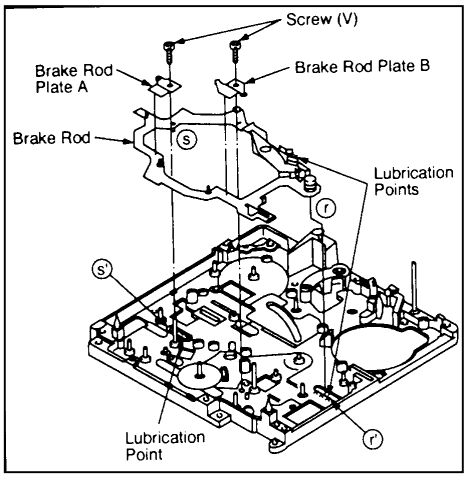


Figure 2-3-32

(Note of installation)
The projection (r) and (s) on the Brake Rod meet with the guide (r') and (s') on the Mechanism Chassis.

2-3-19. Capstan Belt

1. Remove the Center Gear and Washer (W). Unscrew screw (X) and remove LED Holder. Remove Cut Washer (Y).

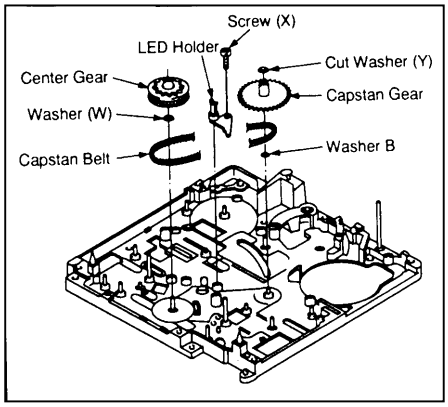


Figure 2-3-33

(Loosen a black screw on the Cap. Motor as shown in Fig.) Slightly lift up in the direction and slowly remove the Capstan Gear. Do not bend the Capstan Shaft.

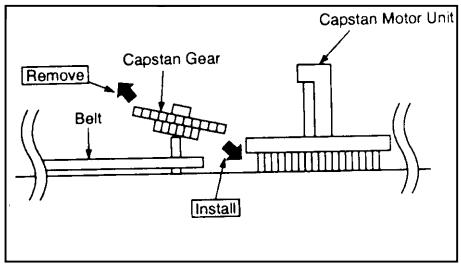


Figure 2-3-34

2. Remove the Capstan Belt.

(Note of installation)
After install Capstan Gear, confirm no warp of the Capstan Gear, no bend of the Capstan Gear Shaft and smooth rotation of the Capstan and Center Gear.

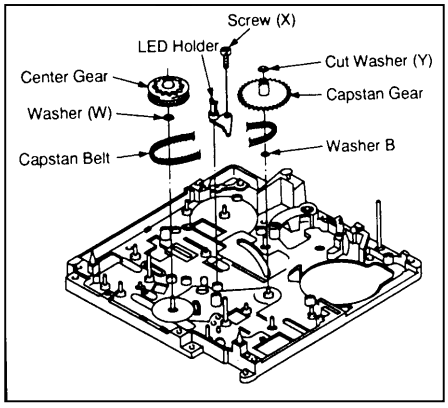


Figure 2-3-35

SECTION 4

ELECTRICAL ADJUSTMENT

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ELECTRICAL ADJUSTMENT PROCEDURE

1. ADJUSTMENT SYSTEM

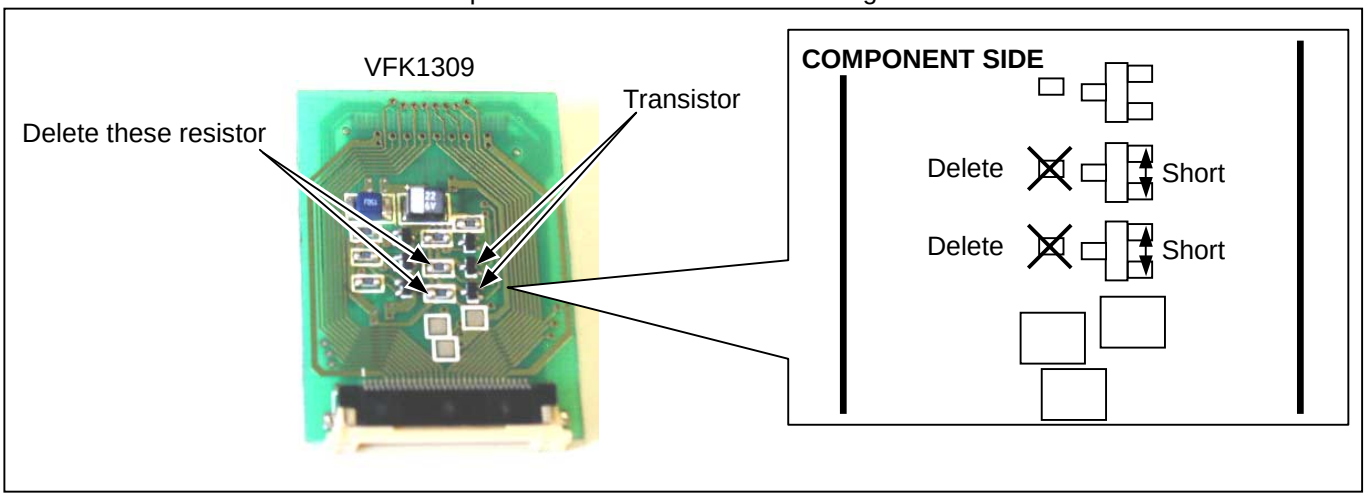
For performing the electrical adjustment, the following tool are required.

NAME	Part Number	Pcs.	Remark
Measuring Board	VFK1308P	1	
EVR Connector Board	VFK1309A	1	NOTE
EVR Extender Board	VFK1694	1	
30pin Flat Cable	VFK1317	2	
DC Cable	VJA0941	1	
9pin RS232C cross cable	---		
AC Adaptor	---		

NOTE:
1. VFK1309 can be use to this adjustment system except LCD adjustment.
2. If you have VFK1309, it can be modified to VFK1309A as following below indicated specification.

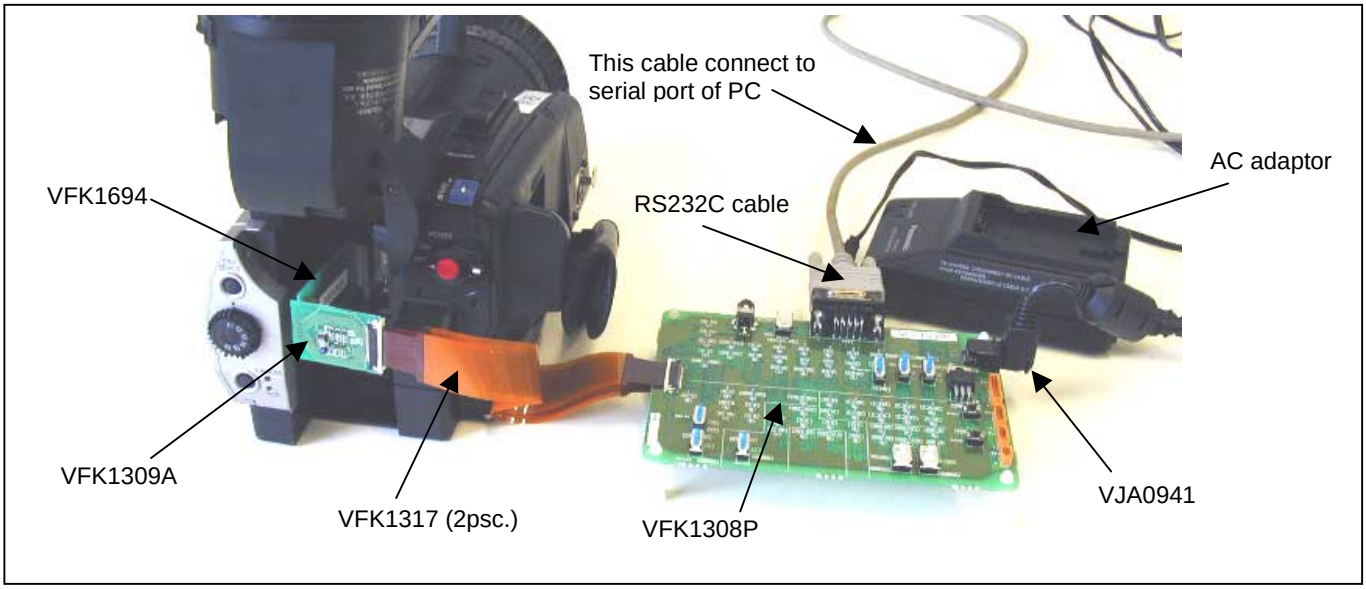
1-1. Modification procedure of VFK1309

1. Delete 2 pieces of resistor as shown figure.
2. Shot between emitter and base of 2 pieces of transistor as shown in figure.



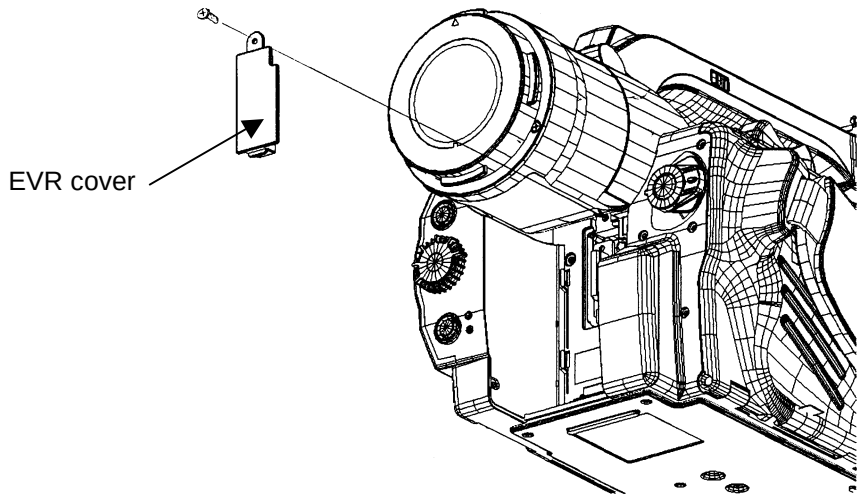
1-2. Connection

Please refer to next item 1-3 as detail explanation.

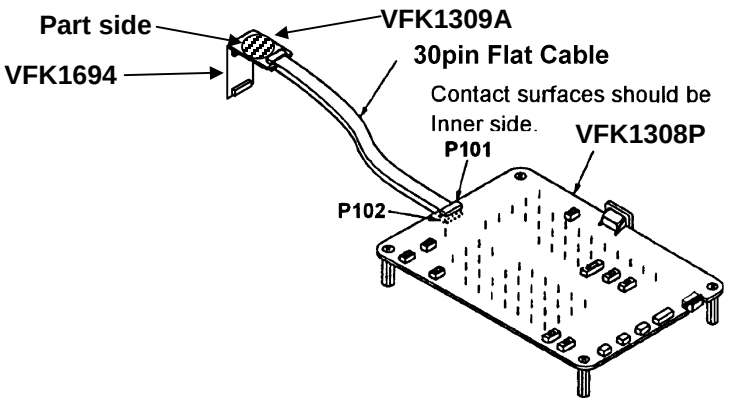


1-3. System Hook up Procedures

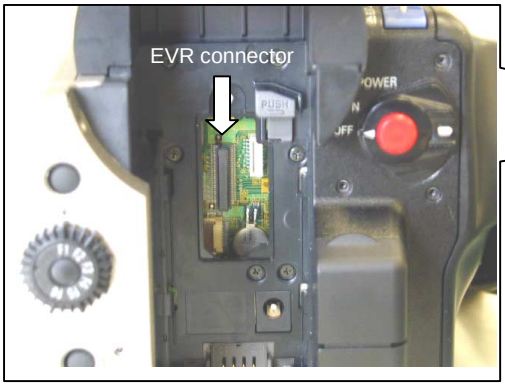
1. Unscrew 1 screw and remove the EVR cover.

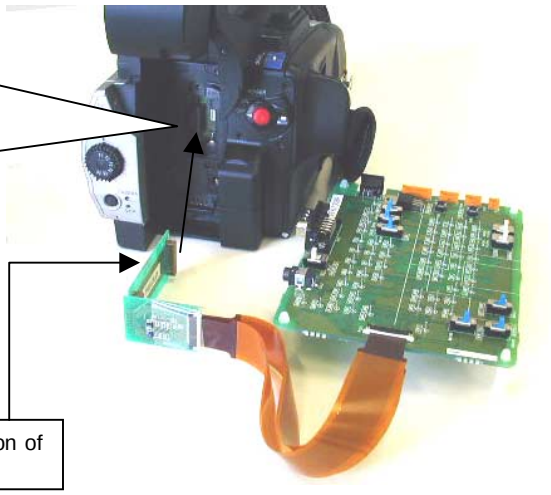


2. Connect the 2 pcs. of 30 pin flat cables (VFK1317) between P101/P102 on the Measuring Board (VFK1308P), and 2 connectors on the EVR Connector Board (VFK1309A). Make sure that the contact surface of 2 pcs. of 30 pin Flat Cables are inner side and direction of the EVR Connector Board is as shown in Figures. Then connect the Extender board (VFK1694).



3. Connect the EVR Extender board (VFK1694) to EVR connector on EVR connect C.B.A. in AG-DVX100. Then make sure that the direction of the Extender Board is correct as shown in Figure.





When the VFK1694 connect to EVR connector, be careful direction of VFK1694. Please follow as shown in the figure.

4. Supply DC6V to the Measuring Board (VFK1308P). Please use the DC cable (VJA0941) and AC Adaptor to supply DC voltage to Measuring Board.
5. Connect a 9 pin RS-232C cable between the Measuring Board and RS-232C connector on Personal Computer as shown in Figure.
6. Unless otherwise specified on the message of the EVR software or this adjustment procedure, set the switches on the Measuring Board as shown in the table below.

NAME	SETTING POSITION
RS232C SEL(SW101)	D-SUB
VTR TEST(SW103)	NORMAL
BST TEST(SW104)	NORMAL
SW107	CENTER position
SW108	H
SW105	H
SW106	OFF
FLUSH1 (SW102)	NORMAL
FLUSH2 (SW109)	NORMAL

2. REQUIRED TOOL & EQUIPMENT FOR ELECTRICAL ADJUSTMENT

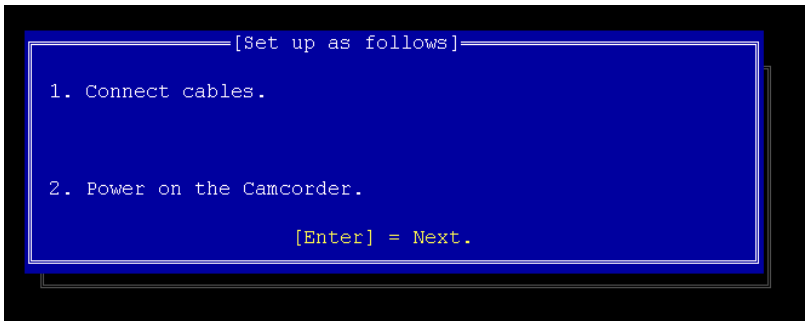
Below indicated tool are required to perform each adjustment except tools introduced item1.

Adjustment	Item	Required Tool
Camera	Hall Amp (Auto)	Unnecessary
	Iris PWM (Auto)	Unnecessary
	OIS (Auto)	Unnecessary
	Zoom Tracking (Auto)	72mm Attachment Ring (VFK1809) 43mm Attachment Ring (VFK1164TAR43) Collimator (VFK1164TCM01)
	White Balance (3100K)	Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (5100K)	CC filter (LB120) (VFK1347) CC filter (LBA2) CC filter (80D) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (4500K)	CC filter (LB120) (VFK1347) CC filter (LBB1) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	White Balance (3600K)	CC filter (LB40) (VFK1341) CC filter (LBB2) 72mm Attachment Ring (VFK1809) CC Filter Holder (VFK1345) Step-down Ring (62mm-52mm) (VFK1346) Step-up Ring (43mm-49mm) (VFK1659) Step-up Ring (49mm-62mm) (VFK1660) Halogen lamp & Grayscale chart Color Pyrometer & Lux Meter
	CCD White scratch damage revision (Auto)	Unnecessary
	White Shading	Halogen lamp
VTR	Sensitivity adj of Tape sensor (Auto)	Tape End/Beg. Sensor Cassette (VFK1217)
	PG Shifter (Auto)	Oscilloscope
	Luminance Level	Waveform Monitor
	Chroma Level	Waveform Monitor
LCD	PLL	Oscilloscope
	Pedestal Level	Oscilloscope
	Contrast	Oscilloscope
	Sub Contrast	Oscilloscope
	White balance	Oscilloscope
EVF	PLL	Oscilloscope
	Pedestal Level	Oscilloscope
	Contrast	Oscilloscope
	Sub Contrast	Oscilloscope
	White balance	Oscilloscope

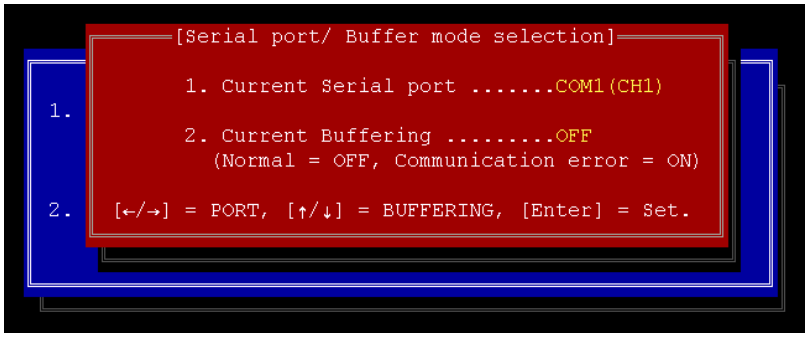
3. PC EVR (ADJUSTMENT) SOFTWARE

3-1. BOOT UP THE ADJUSTMENT SOFTWARE

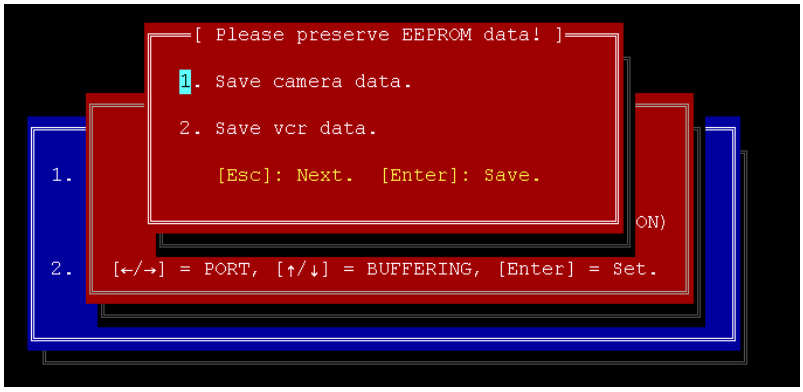
1. Copy all files on the floppy disc (VFK1811: EVR software) to created directly on PC(i.e.; C:¥DVX100).
2. Restart the PC in DOS mode.
3. Type “DVX100” and press ENTER key, then EVR software boot up.
4. Wait for a few seconds so that the EVR adjustment program is started.



PRESS ENTER KEY

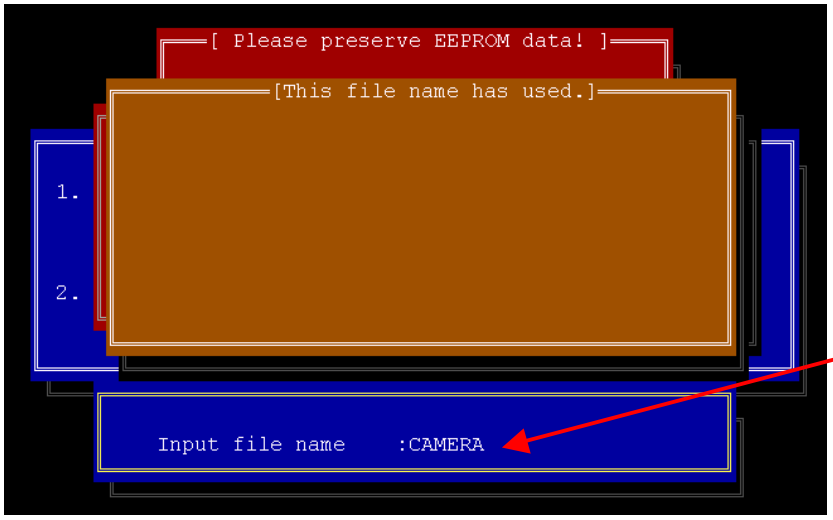

[Serial port/ Buffer mode selection]
1. Current Serial port .....COM1(CH1)
2. Current Buffering .....OFF
(Normal = OFF, Communication error = ON)
[←/→] = PORT, [↑/↓] = BUFFERING, [Enter] = Set.

PRESS ENTER KEY

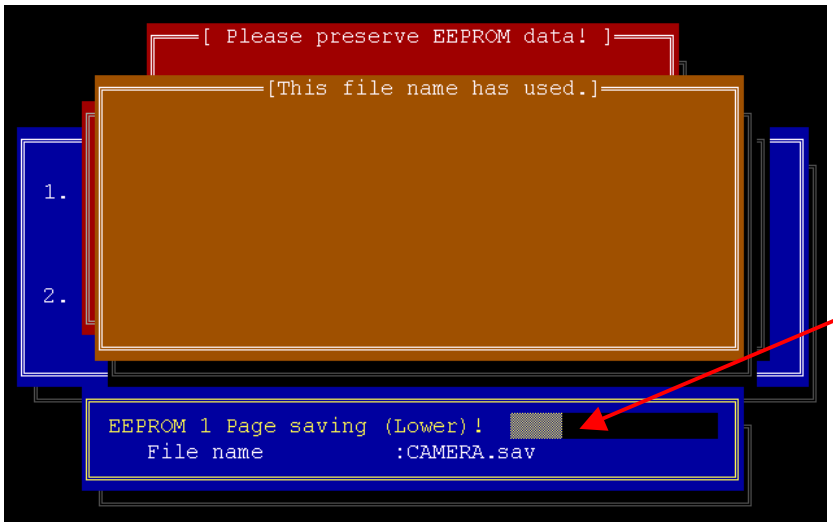


Normally this screen is appeared. We recommended store the EEPROM data before start adjustment. If you want to skip store the data, PRESS ESC KEY, then goes to Main menu.

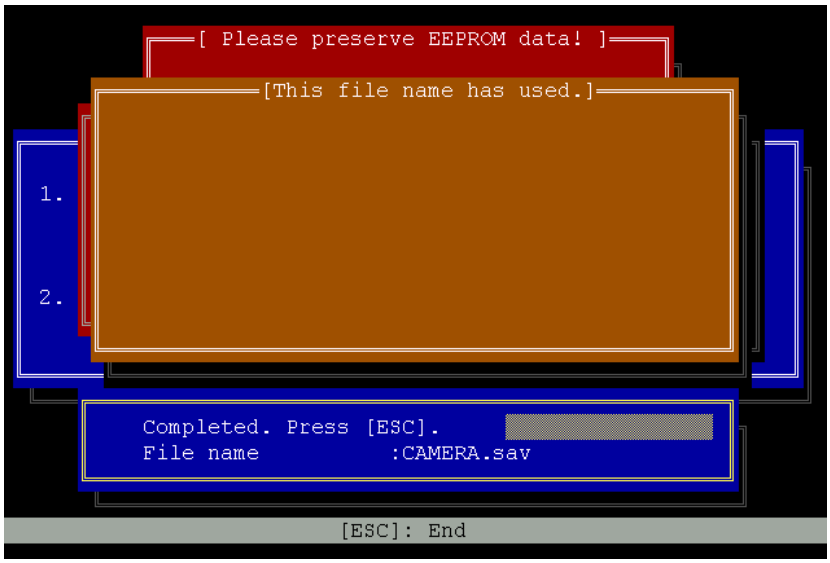
In case of select No.1



Input file name and PRESS ENTER KEY.

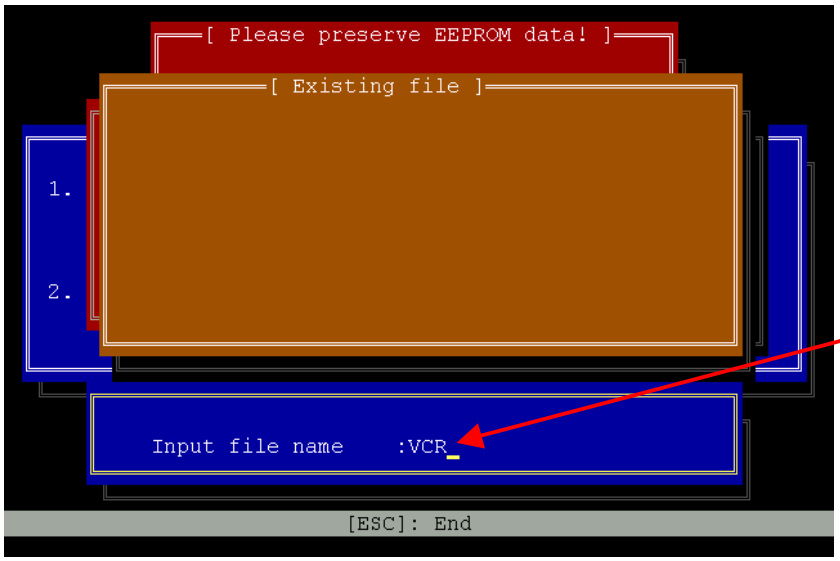


Saving the data is started.

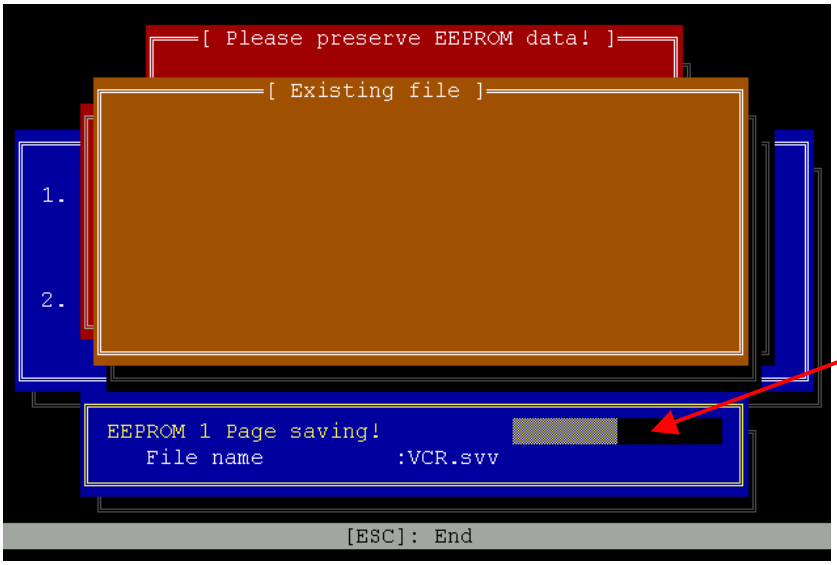


When the data is stored completed, this screen is appeared. PRESS ESC KEY.

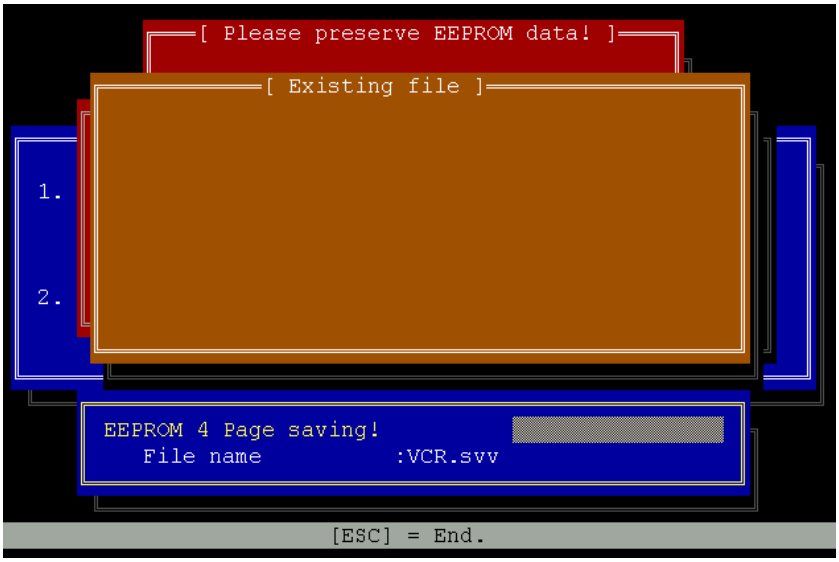
Return to this screen and in case of select No.2. PRESS ENTER KEY.



Input file name and PRESS ENTER KEY.



Saving the data is started.

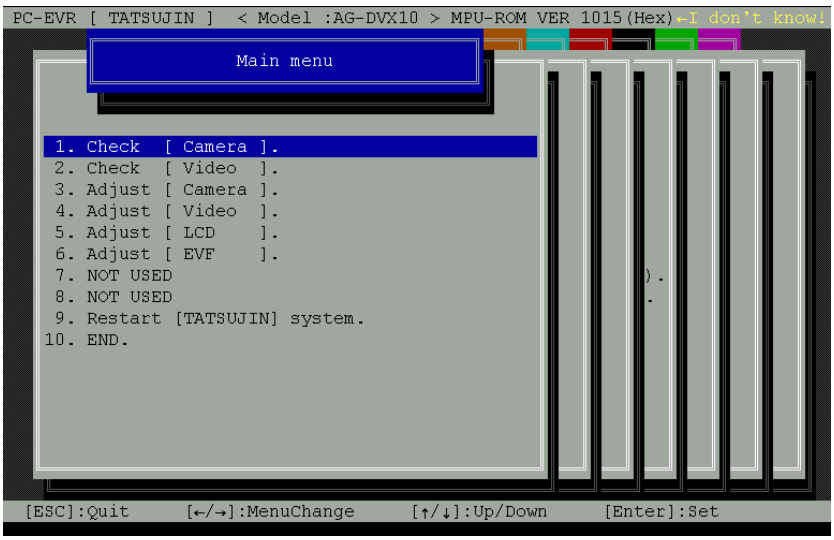


When the data is stored completed, this screen is appeared. PRESS ESC KEY.

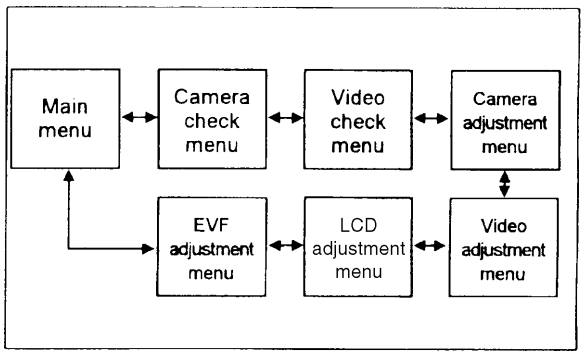
3-2. How to Use the Main Menu

Select a Sub Menu to check, adjust the unit and etc. by pressing ↑↓ (UP/DOWN) Key in Main Menu. Then press "ENTER" Key. the Sub Menu will be displayed.

NOTE: Menu (pages) 3,4,5 and 6 are needed for adjustment.

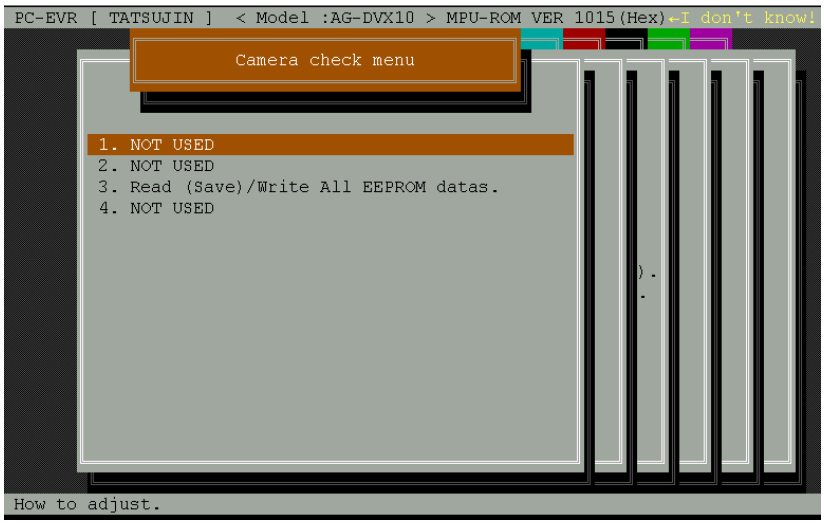

PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Main menu
1. Check [Camera].
2. Check [Video].
3. Adjust [Camera].
4. Adjust [Video].
5. Adjust [LCD].
6. Adjust [EVF].
7. NOT USED
8. NOT USED
9. Restart [TATSUJIN] system.
10. END.
[ESC]:Quit [←/→]:MenuChange [↑/↓]:Up/Down [Enter]:Set

With using ←→ keys, also the menu can be changed.

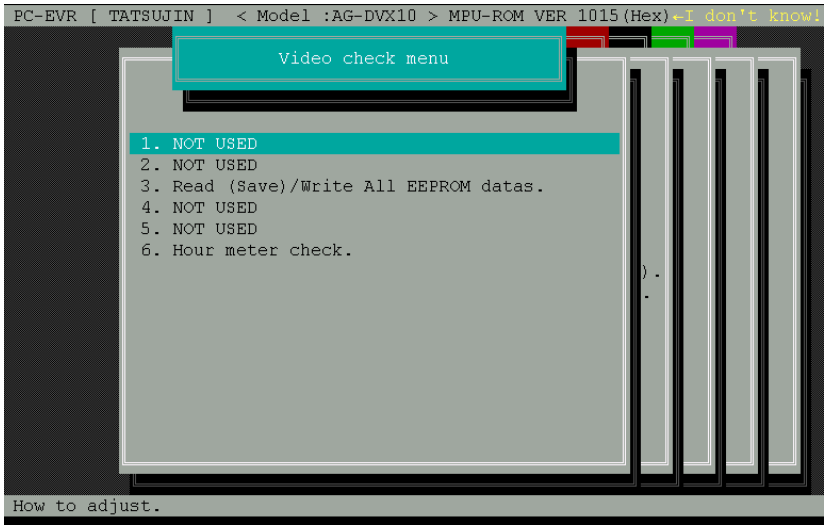


3-3. Introduction of the Sub Menu

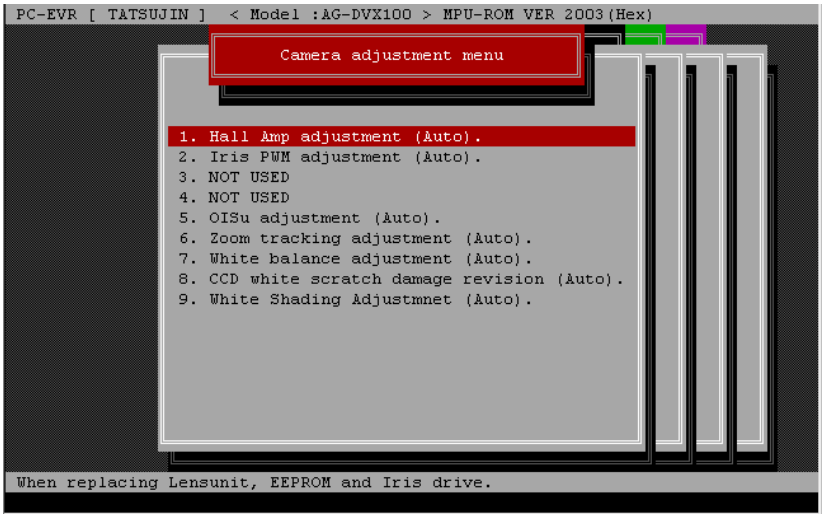
1) Camera Check Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Camera check menu
1. NOT USED
2. NOT USED
3. Read (Save)/Write All EEPROM datas.
4. NOT USED
How to adjust.

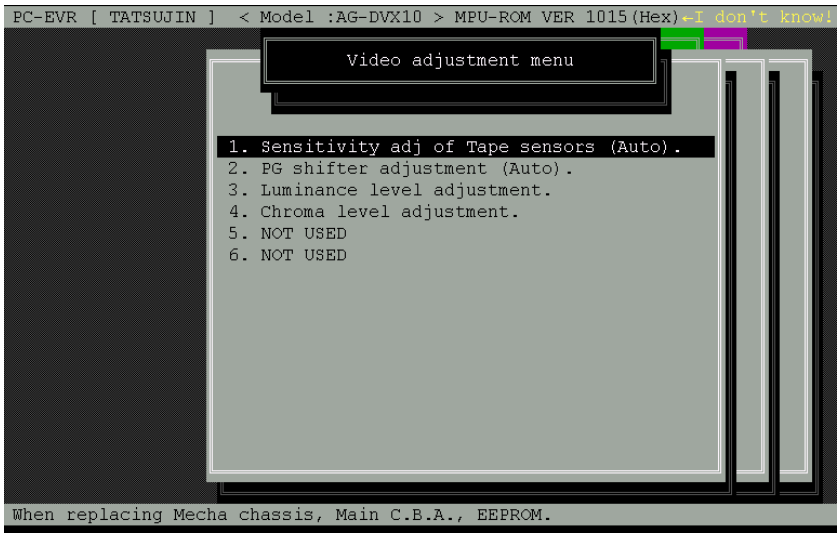
2) Video Check Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Video check menu
1. NOT USED
2. NOT USED
3. Read (Save)/Write All EEPROM datas.
4. NOT USED
5. NOT USED
6. Hour meter check.
How to adjust.

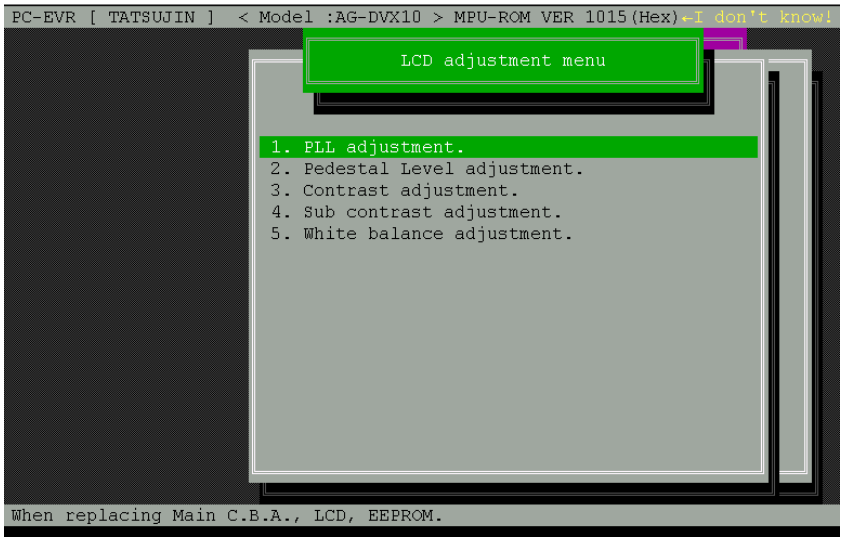
3) Camera Adjustment Menu


PC-EVR [TATSUJIN] < Model :AG-DVX100 > MPU-ROM VER 2003(Hex)
Camera adjustment menu
1. Hall Amp adjustment (Auto).
2. Iris PWM adjustment (Auto).
3. NOT USED
4. NOT USED
5. OISu adjustment (Auto).
6. Zoom tracking adjustment (Auto).
7. White balance adjustment (Auto).
8. CCD white scratch damage revision (Auto).
9. White Shading Adjustmnet (Auto).
When replacing Lensunit, EEPROM and Iris drive.

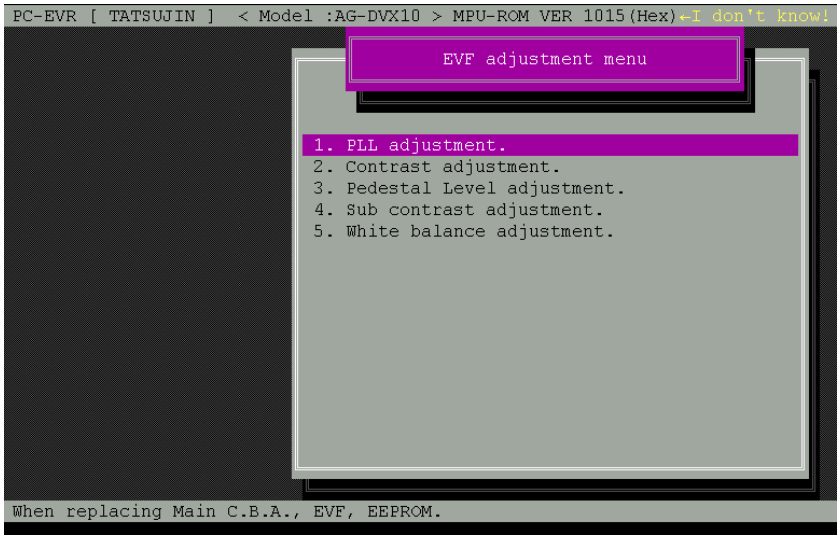
4) Video Adjustment Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Video adjustment menu
1. Sensitivity adj of Tape sensors (Auto).
2. PG shifter adjustment (Auto).
3. Luminance level adjustment.
4. Chroma level adjustment.
5. NOT USED
6. NOT USED
When replacing Mecha chassis, Main C.B.A., EEPROM.

5) LCD Adjustment Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
LCD adjustment menu
1. PLL adjustment.
2. Pedestal Level adjustment.
3. Contrast adjustment.
4. Sub contrast adjustment.
5. White balance adjustment.
When replacing Main C.B.A., LCD, EEPROM.

6) EVF Adjustment Menu


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
EVF adjustment menu
1. PLL adjustment.
2. Contrast adjustment.
3. Pedestal Level adjustment.
4. Sub contrast adjustment.
5. White balance adjustment.
When replacing Main C.B.A., EVF, EEPROM.

4. EEPROM

All adjustment data has been stored in the EEPROM.
There are two EEPROM in this unit as shown in the table below.

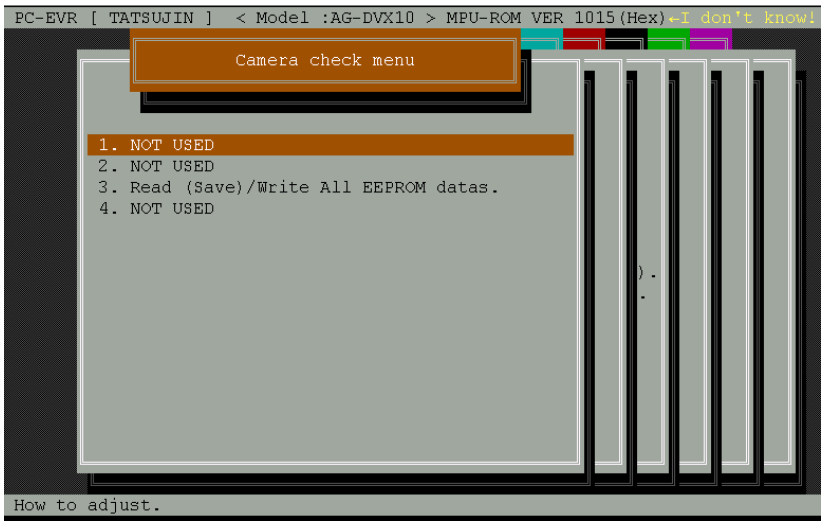
EEPROM LOCATION

C.B.A.	EEPROM IC Ref.No.
Camera C.B.A.	IC307
VTR C.B.A.	IC2008

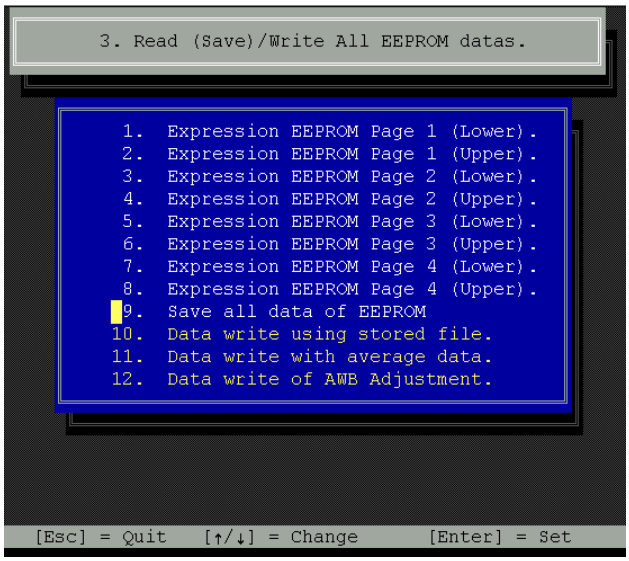
NOTE:
Be sure to save both the EEPROM data into the personal computer before performing service and adjustment, in order to avoid any accidental data loss.

4-1. How to Save Camera EEPROM Data

1) Select “1.Check [Camera].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Camera check menu, and then press the “Enter” key.


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Camera check menu
1. NOT USED
2. NOT USED
3. Read (Save)/Write All EEPROM datas.
4. NOT USED
How to adjust.

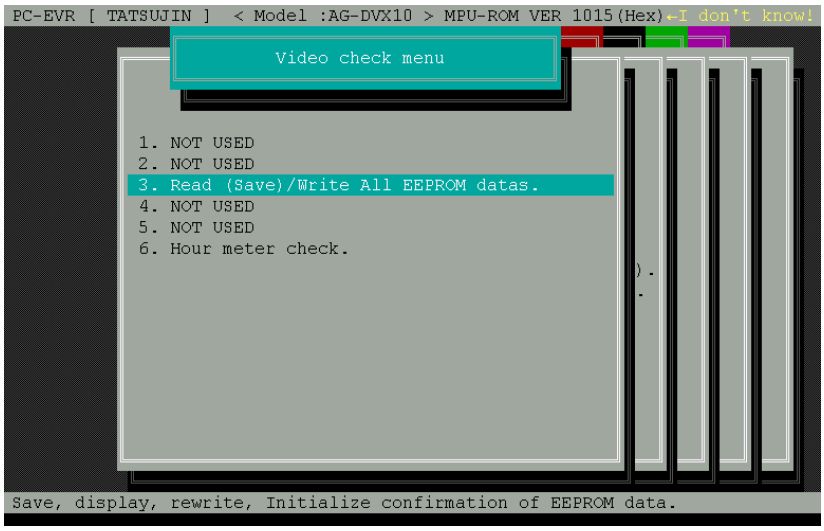
3) Select “9.Save all data of EEPROM” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.


3. Read (Save)/Write All EEPROM datas.
1. Expression EEPROM Page 1 (Lower).
2. Expression EEPROM Page 1 (Upper).
3. Expression EEPROM Page 2 (Lower).
4. Expression EEPROM Page 2 (Upper).
5. Expression EEPROM Page 3 (Lower).
6. Expression EEPROM Page 3 (Upper).
7. Expression EEPROM Page 4 (Lower).
8. Expression EEPROM Page 4 (Upper).
9. Save all data of EEPROM
10. Data write using stored file.
11. Data write with average data.
12. Data write of AWB Adjustment.
[Esc] = Quit [↑/↓] = Change [Enter] = Set

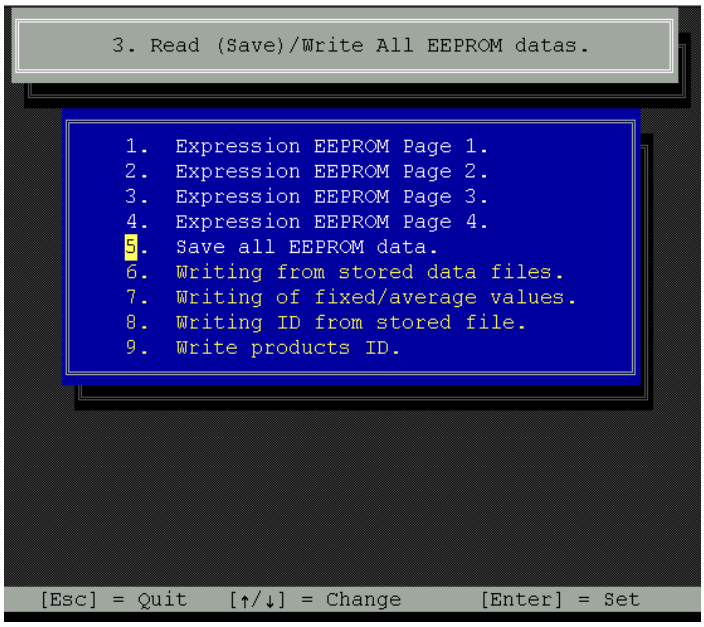
4) Type the File name and, then press the “Enter” key. The data of EEPROM (IC307) can be stored in the personal computer. (Please refer to item “2-1. BOOT UP THE ADJUSTMENT SOFTWARE”)

4-2. How to Save VTR EEPROM Data

1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Video check menu, and then press the “Enter” key.


PC-EVR [TATSUJIN] < Model :AG-DVX10 > MPU-ROM VER 1015(Hex)←I don't know!
Video check menu
1. NOT USED
2. NOT USED
3. Read (Save)/Write All EEPROM datas.
4. NOT USED
5. NOT USED
6. Hour meter check.
Save, display, rewrite, Initialize confirmation of EEPROM data.

3) Select “5.Save all EEPROM data” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.


3. Read (Save)/Write All EEPROM datas.
1. Expression EEPROM Page 1.
2. Expression EEPROM Page 2.
3. Expression EEPROM Page 3.
4. Expression EEPROM Page 4.
5. Save all EEPROM data.
6. Writing from stored data files.
7. Writing of fixed/average values.
8. Writing ID from stored file.
9. Write products ID.
[Esc] = Quit [↑/↓] = Change [Enter] = Set

4) Type the File name, and then press the “Enter” key. The data of EEPROM (IC2008) will be stored in the personal computer.

4-3. REWRITE Saved Data

When Camera or VTR C.B.A is replaced, It becomes impossible to adjustment or repairing during service operation, rewrite the saved data which is stored in EEPROM as follows. And readjust.

4-3-1. How to Rewrite EEPROM data on Camera C.B.A.

1) Select “1.Check [Camera].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Camera check menu, and then press the “Enter” key.
3) Select “10.Data write using stored file” in Read [Save]/Write All EEPROM data menu, and then press the “Enter” key.
4) Type the saved file name, and then press the “Enter” key.
5) Select “9.EEPROM ALL (2 Kbyte)” , and then press the “Enter” key.
6) The data can be written in EEPROM (IC307).

4-3-2. How to Rewrite EEPROM data on VTR C.B.A.

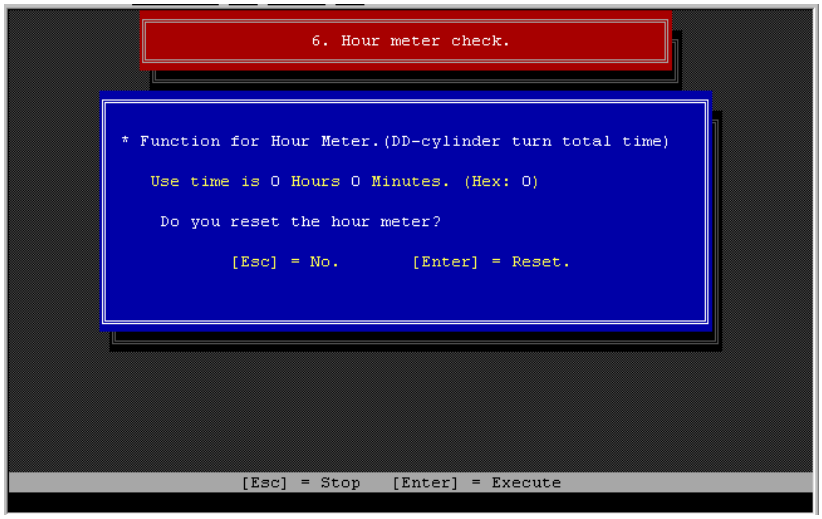
1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “3.Read [Save]/Write All EEPROM data” in the Video check menu, and then press the “Enter” key.
3) Select “3.Writing from the stored data files” in the Read [Save]/Write All EEPROM data menu, and then press “Enter” key.
4) Type the saved file name, and then press the “Enter” key.
5) Select “5.Write EEPROM (1024 byte)” , and then press the “Enter” key.
6) The data can be written in EEPROM (IC2008).

5. HOUR METER RESET

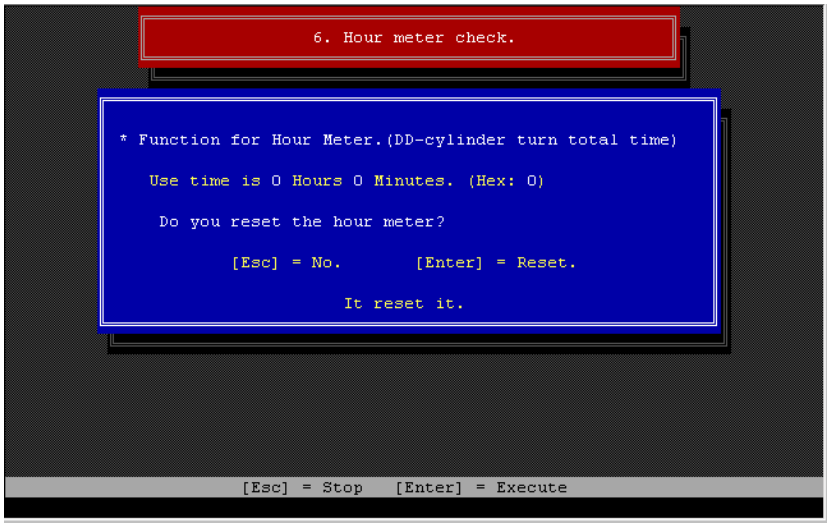
Hour Meter can be reset by use this EVR software.

<How to reset Hour Meter>

1) Select “2.Check [Video].” In the Main menu, and then press the “Enter” key.
2) Select “6.Hour meter check” in the Video check menu, and then press the “Enter” key.


6. Hour meter check.
* Function for Hour Meter.(DD-cylinder turn total time)
Use time is 0 Hours 0 Minutes. (Hex: 0)
Do you reset the hour meter?
[Esc] = No.
[Enter] = Reset.
[Esc] = Stop
[Enter] = Execute

3) Press the “ENTER” key, then reset is executed.



4) After finish this operation, the program goes to “Video Check Menu” automatically.
5) Open the “OTHER FUNCTION” menu in AG-DVX100 and confirm that the HOUR METER display is change to “00000H”.

6. CAMERA ADJUSTMENT PROCEDURE

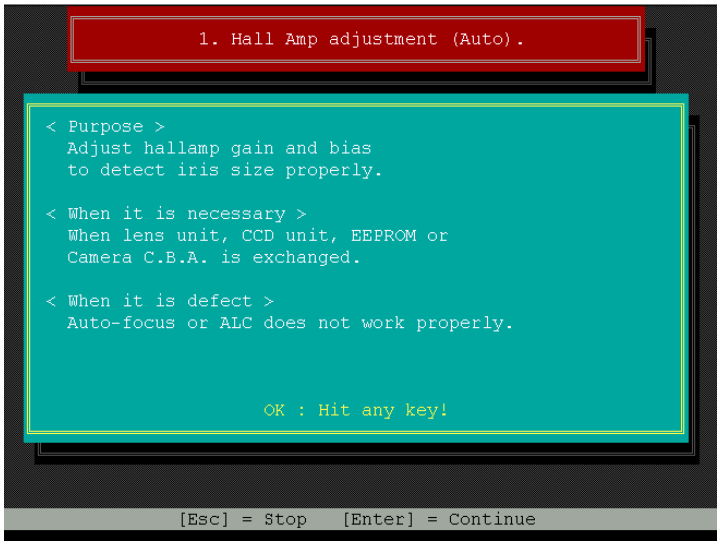
Be sure to save the Camera EEPROM data into the Personal Computer, before performing adjustment.

Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

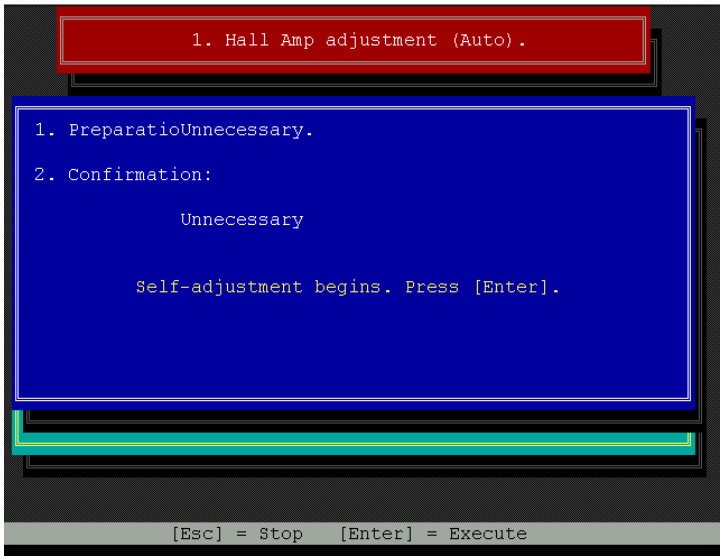
6-1. Hall Amp Adjustment (AUTO)

This adjustment can be adjust automatically.

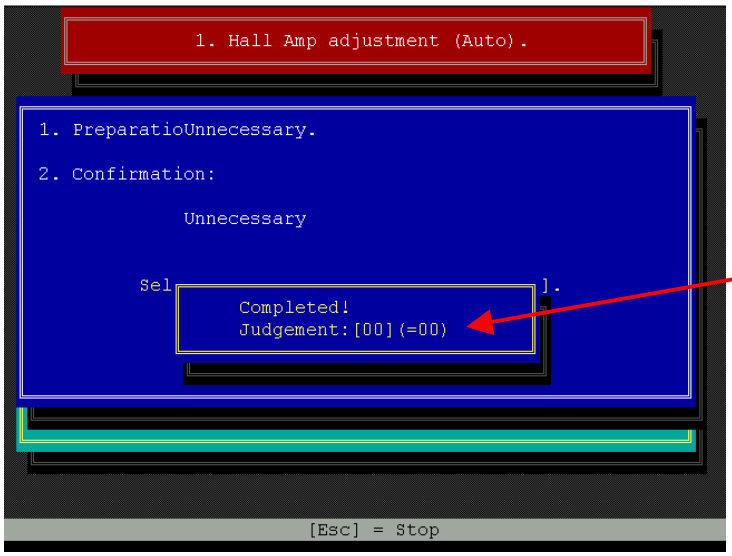
1. Open the “Camera adjustment menu”.
2. Select “1.Hall Amp adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

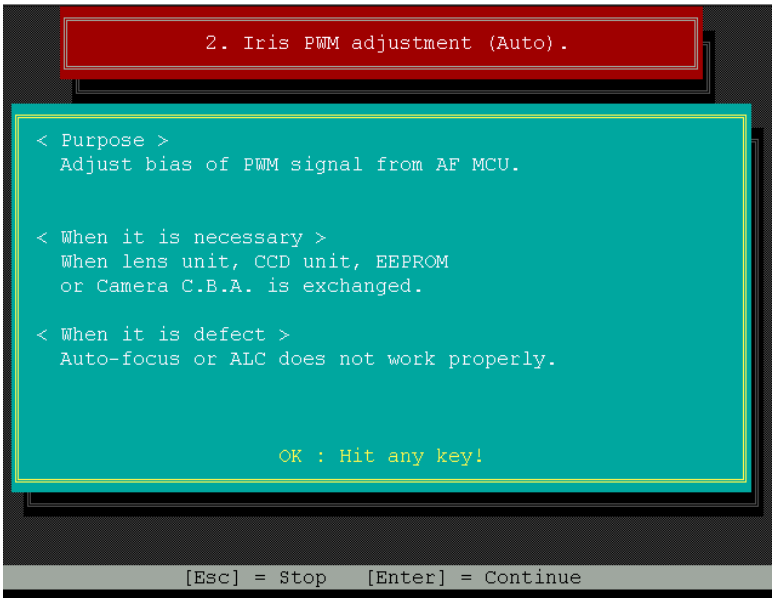


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

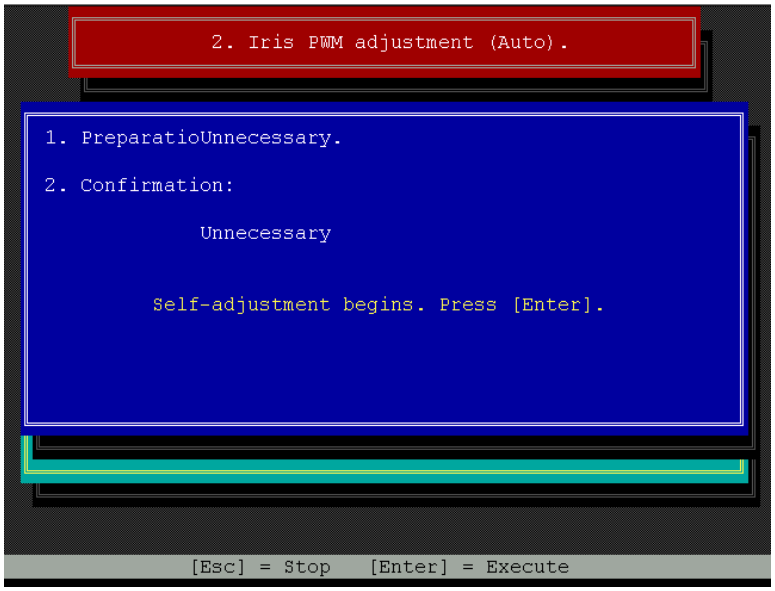
6-2. Iris PWM Adjustment (AUTO)

This adjustment can be adjust automatically.

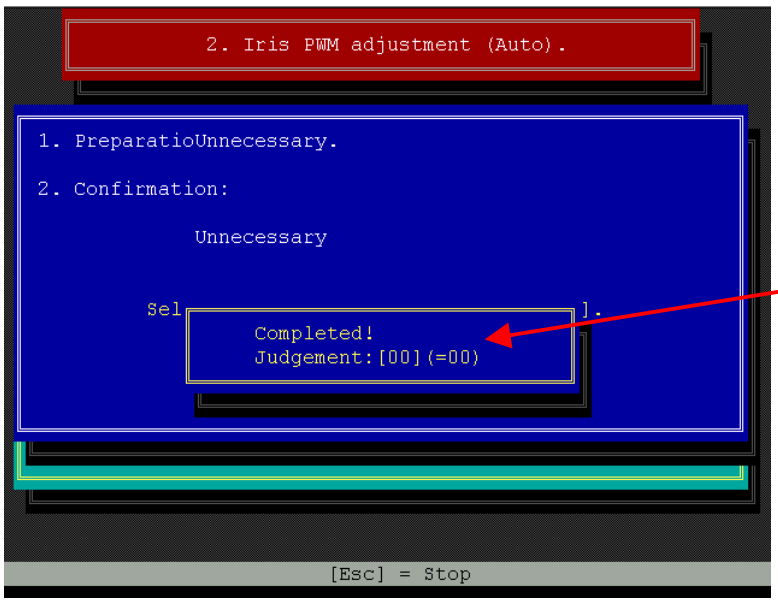
1. Open the “Camera adjustment menu”.
2. Select “2.Iris PWM adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.



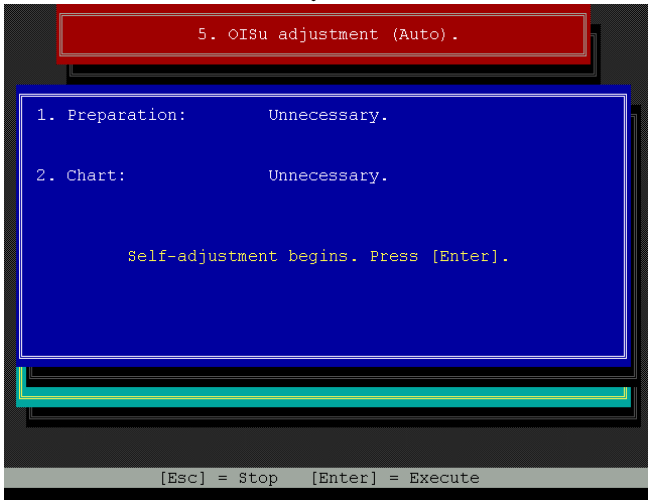
When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

6-3. OISu Adjustment (AUTO)

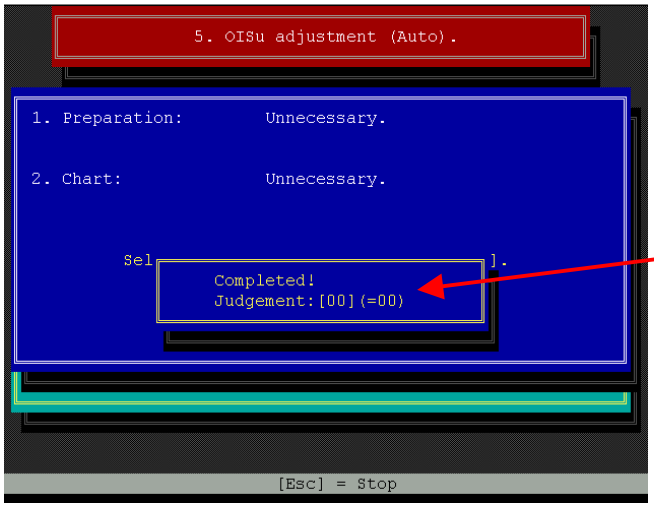
This adjustment can be adjust automatically.

1. Open the “Camera adjustment menu”.
2. Select “5.OISu adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.

PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

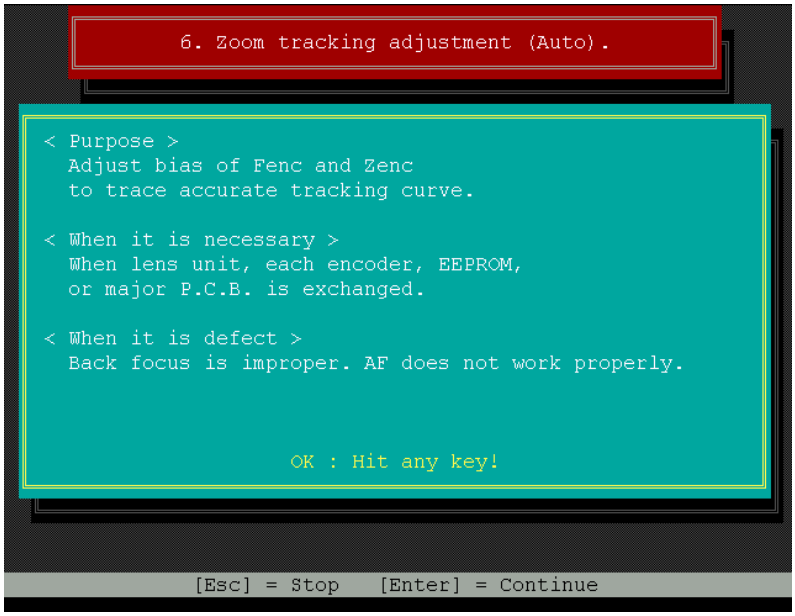


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

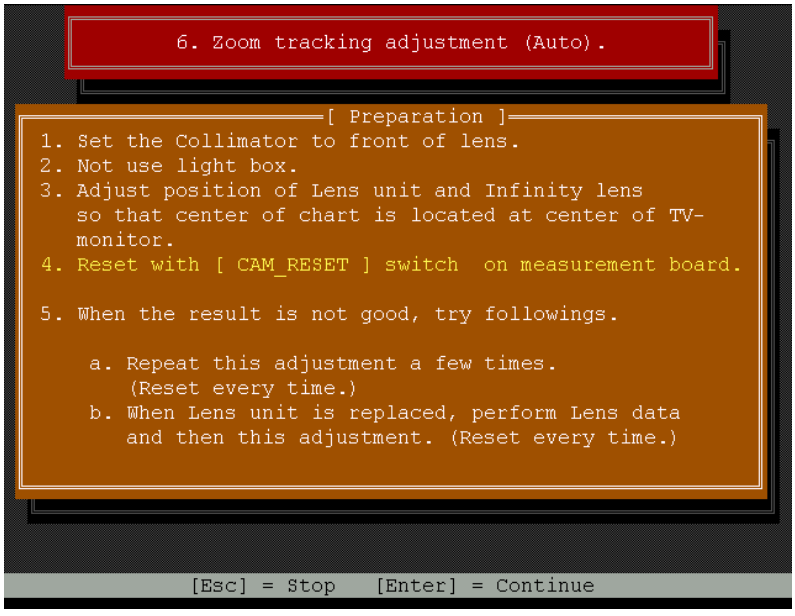
6-4. Zoom Tracking Adjustment (AUTO)

This adjustment can be adjust automatically.

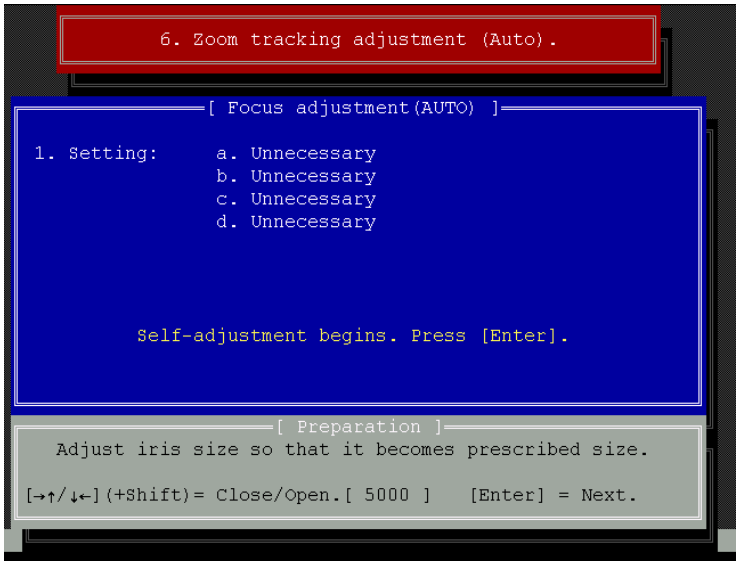
1. Set the 72mm Attachment Ring(VFK1809) to front of the Lens.
2. Set the 43mm attachment ring (VFK1164TAR44) to Collimator (VFK1164TCM01).
3. Set the Collimator (VFK1164TCM01) with the 43mm attachment ring (VFK1164TAR44) to 72mm Attachment Ring(VFK1809).
4. Open the “Camera adjustment menu”.
5. Select “6.Zoom Tracking adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
6. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.


6. Zoom tracking adjustment (Auto).
< Purpose >
Adjust bias of Fenc and Zenc
to trace accurate tracking curve.
< When it is necessary >
When lens unit, each encoder, EEPROM,
or major P.C.B. is exchanged.
< When it is defect >
Back focus is improper. AF does not work properly.
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

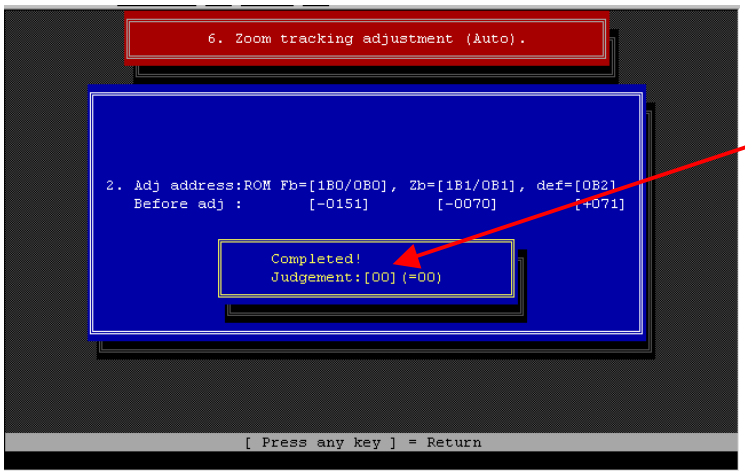
PRESS ENTER KEY.


6. Zoom tracking adjustment (Auto).
[Preparation]
1. Set the Collimator to front of lens.
2. Not use light box.
3. Adjust position of Lens unit and Infinity lens
so that center of chart is located at center of TV-
monitor.
4. Reset with [CAM_RESET] switch on measurement board.
5. When the result is not good, try followings.
a. Repeat this adjustment a few times.
(Reset every time.)
b. When Lens unit is replaced, perform Lens data
and then this adjustment. (Reset every time.)
[Esc] = Stop [Enter] = Continue

PRESS ENTER KEY.


6. Zoom tracking adjustment (Auto).
[Focus adjustment(AUTO)]
1. Setting: a. Unnecessary
b. Unnecessary
c. Unnecessary
d. Unnecessary
Self-adjustment begins. Press [Enter].
[Preparation]
Adjust iris size so that it becomes prescribed size.
[→↑/↓←](+Shift)= Close/Open.[5000] [Enter] = Next.

PRESS ENTER KEY, then adjustment is started.


6. Zoom tracking adjustment (Auto).
2. Adj address:ROM Fb=[1B0/0B0], Zb=[1B1/0B1], def=[0B2]
Before adj : [-0151] [-0070] [+071]
Completed!
Judgement:[00](=00)
[Press any key] = Return

When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

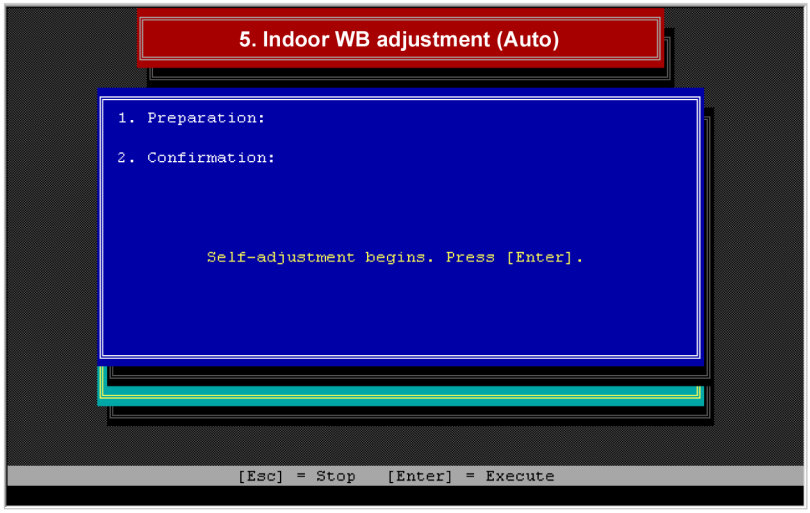
7. After finish this adjustment, press “CAM RESET” switch on Measuring Board(VFK1308P).
NOTE: Please perform this adjustment twice.
8. Confirm that the AG-DVX100 set to Auto Focus mode.
9. Connect the VIDEO OUT to Monitor TV.
9. Press the Zoom button to set maximum TELE side.
10. Confirm that the focus chart appeared clear and Numerical value of Focus control information display. (The value should be appeared “AF95 +/- 1”
11. Set the AG-DVX100 to manual focus mode.
12. Press the Zoom button to change zoom position to maximum WIDE from maximum TELE side, then confirm that the focus chart appeared clear and Zoom position display number changed smoothly.

6-5. White Balance Adjustment (AUTO)

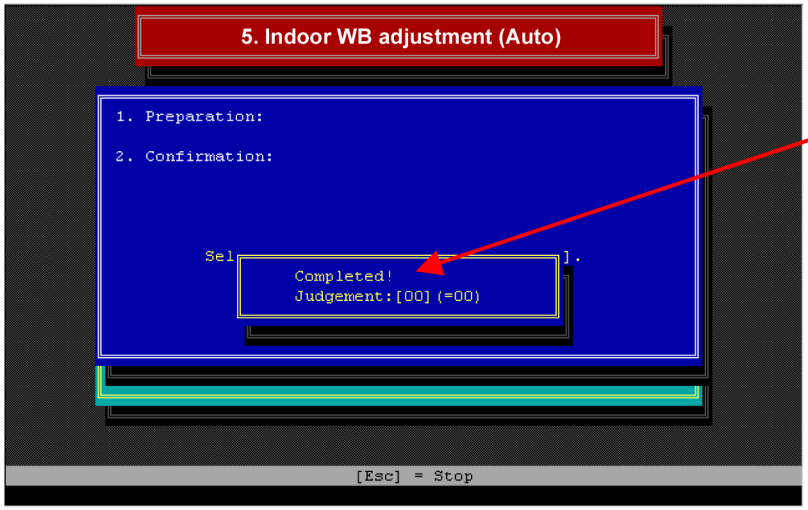
This adjustment can be adjust automatically.
Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.
<Preparation>
1. Set the ND FILTER SW to 1/8 position.
2. Set the DVX100 to ATW mode.
3. Execute the ABB.

6-5-1. Indoor (3100K) White Balance Adjustment (AUTO)

1. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
2. Open the “Camera adjustment menu”.
3. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
4. Select “5.Indoor (3100K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY, then adjustment is started.

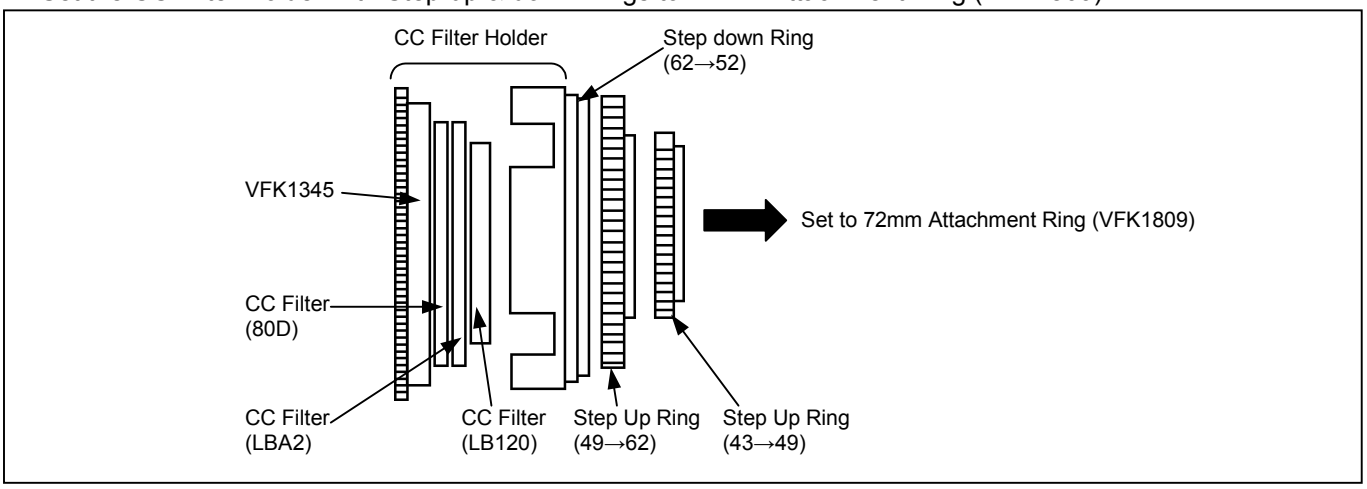


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

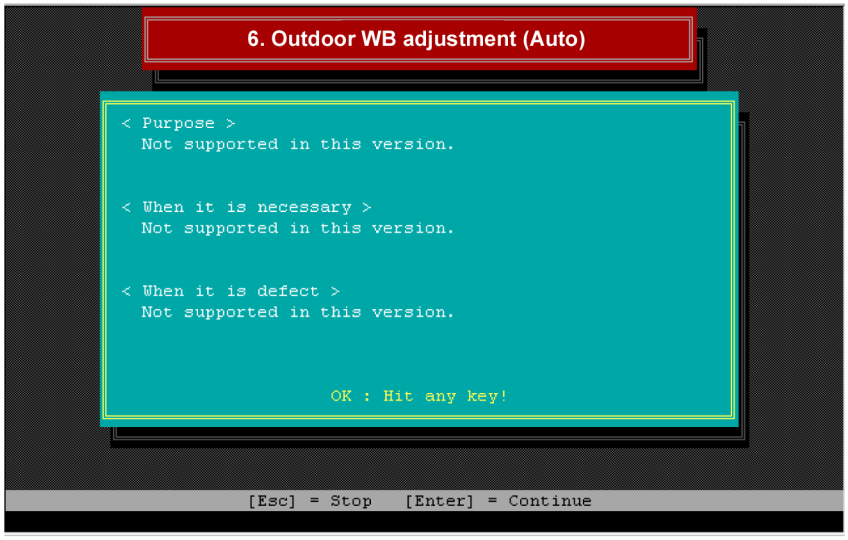
5. Press the “CAM_RESET” SW on VFK1308P and then press the “Enter” key.

6-5-2. Outdoor (5100K) White Balance Adjustment (Auto)

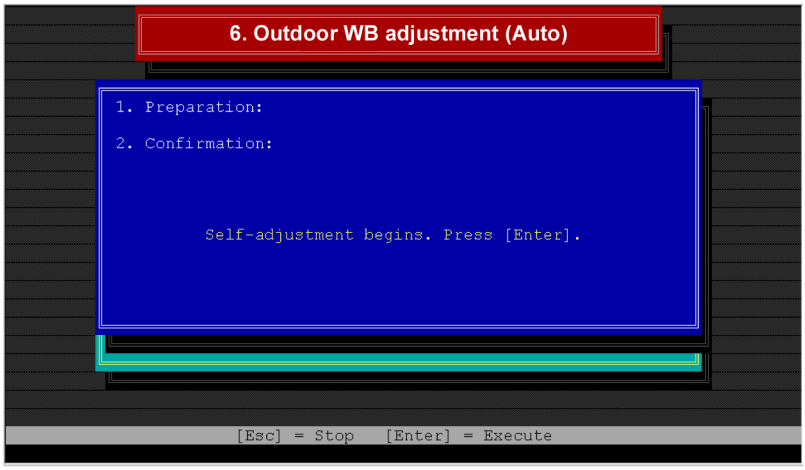
1. Set the Color Conversion filters (LB120 : VFK1347), (LBA2) and (80D) to CC Filter Holder(VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



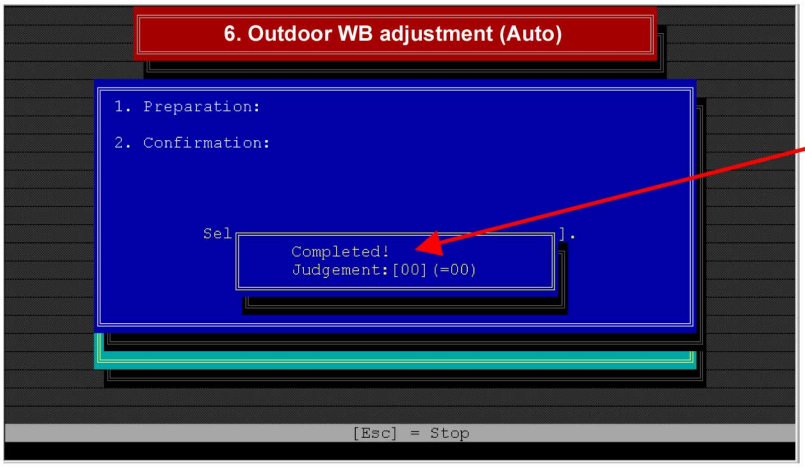
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “6.Outdoor (5100K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.



PRESS ENTER KEY, then adjustment is started.

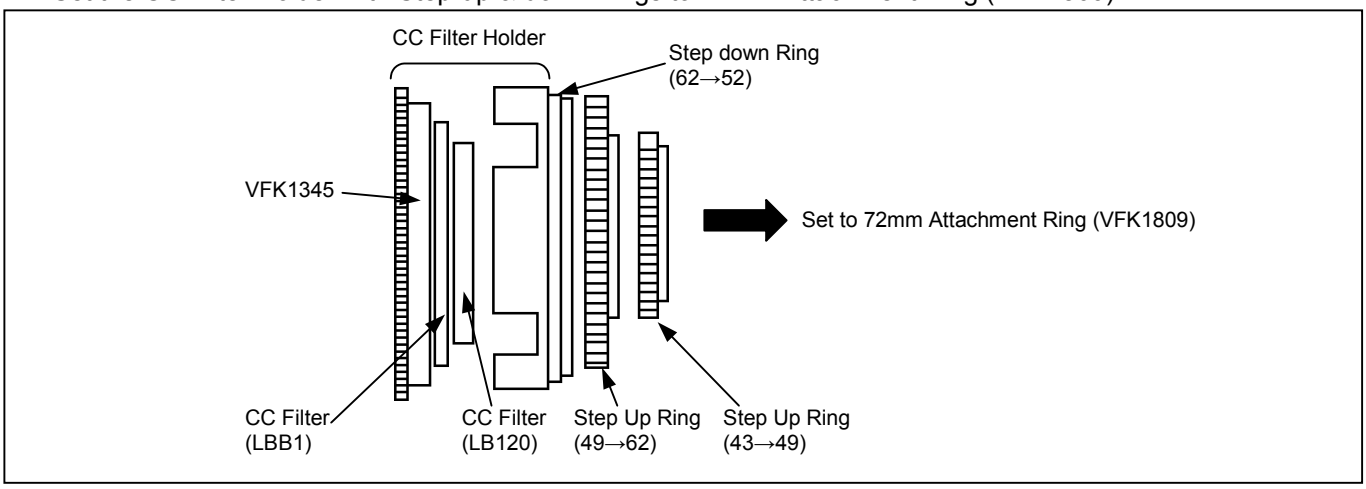


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

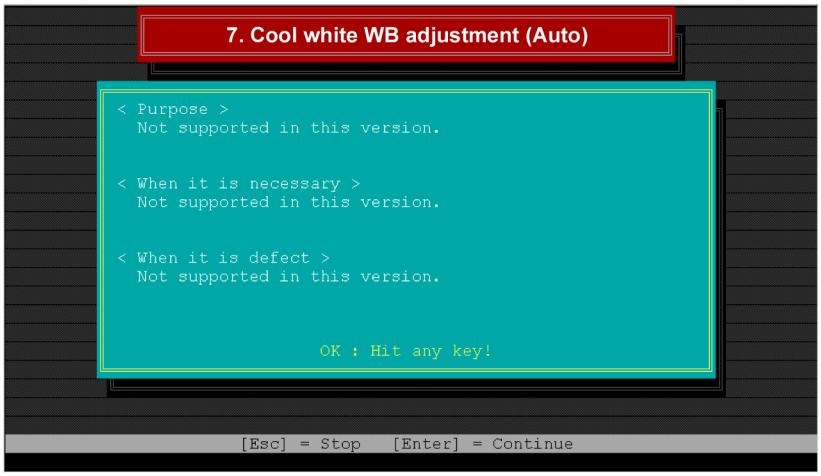
9. Press the “CAM_RESET” SW on VFK1308P , and then press the “Enter” key.

6-5-3. Cool white (4500K) White Balance Adjustment (Auto)

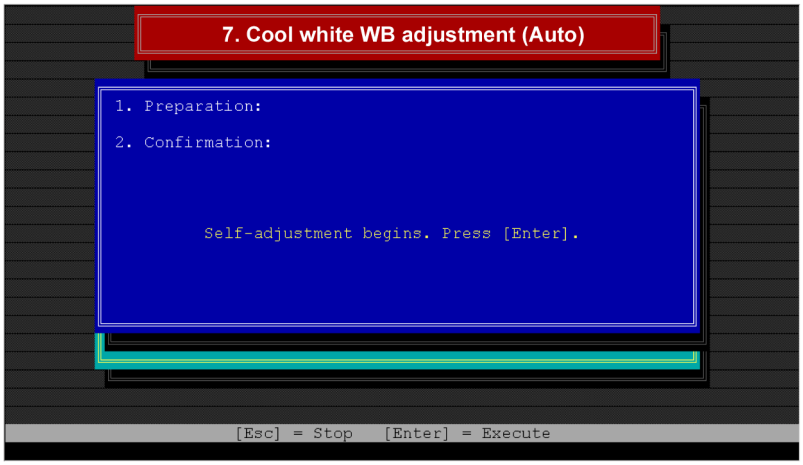
1. Set the Color Conversion filters (LB120 : VFK1347) and (LBB1) to CC Filter Holder (VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



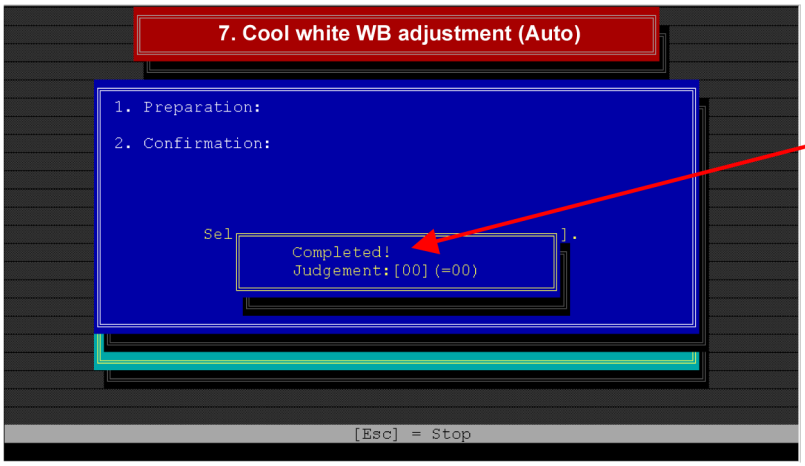
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “7.Cool white (4500K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.


7. Cool white WB adjustment (Auto)
1. Preparation:
2. Confirmation:
Self-adjustment begins. Press [Enter].
[Esc] = Stop [Enter] = Execute

PRESS ENTER KEY, then adjustment is started.

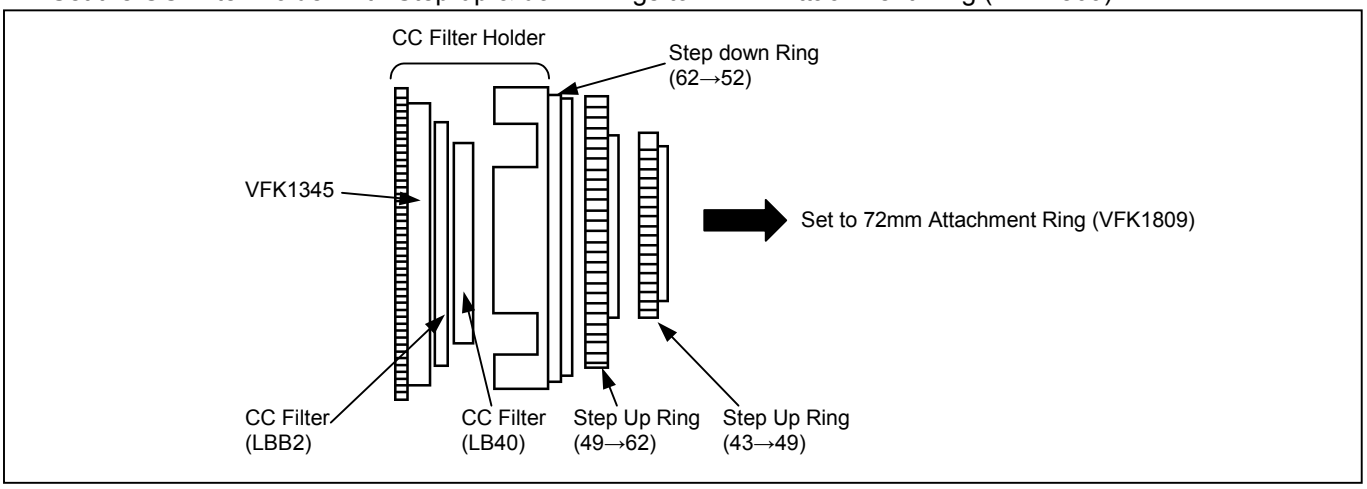


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

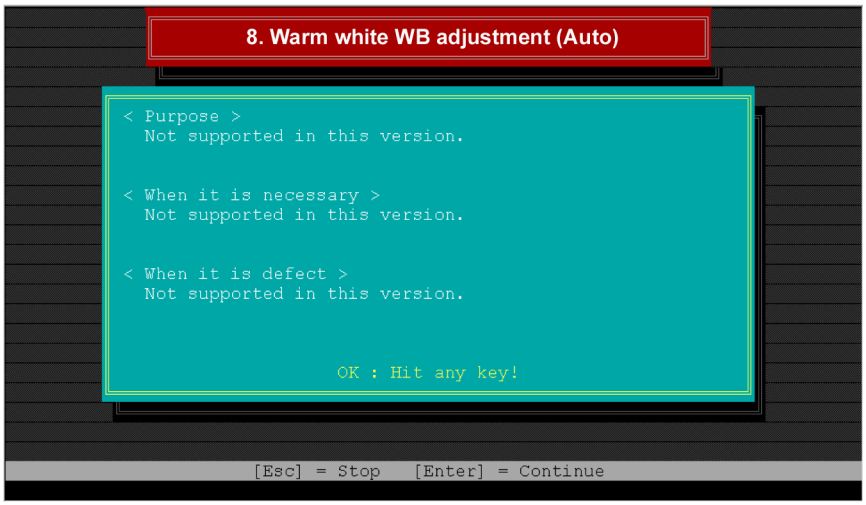
9. Press the “CAM_RESET” SW on VFK1308P, and then press the “Enter” key.

6-5-4. Wram white (3600K) White Balance Adjustment (Auto)

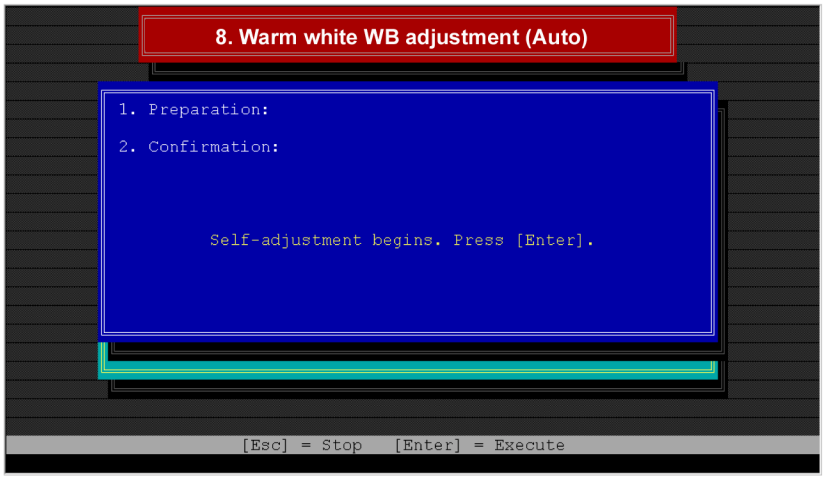
1. Set the Color Conversion filters (LB40 : VFK1341) and (LBB2) to CC Filter Holder (VFK1345).
2. Set the one Step-down Ring(VFK1346) and two Step Up Rings (VFK1659, VFK1660) to CC Filter Holder as shown in figure.
3. Set the 72mm Attachment Ring (VFK1809) to front of the Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 72mm Attachment Ring (VFK1809).



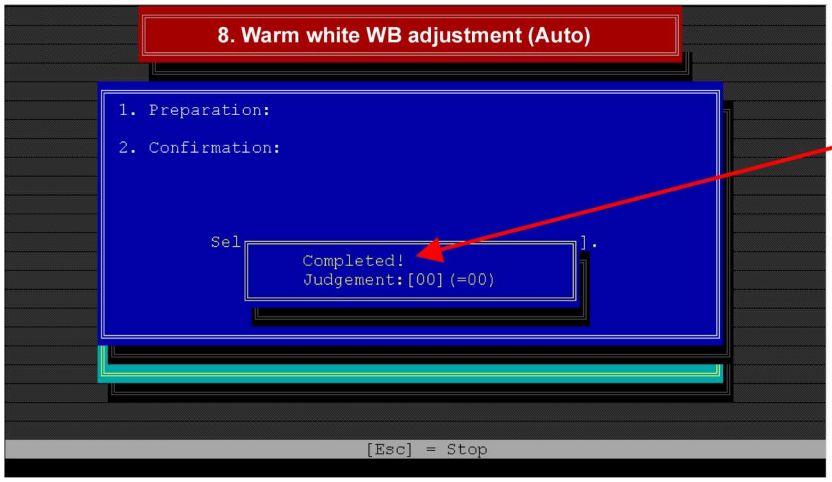
5. Aim the unit at Grayscale Chart under the Halogen lamp condition (3100K, 2000Lux).
6. Open the “Camera adjustment menu”.
7. Select “7.White Balance adjustment” in the Camera adjustment menu, and then press the “Enter” key.
8. Select “8.Wram white (3600K) WB adjustment (Auto)” in the White balance adjustment menu, and then press the “Enter” key.



PRESS ENTER KEY.


8. Warm white WB adjustment (Auto)
1. Preparation:
2. Confirmation:
Self-adjustment begins. Press [Enter].
[Esc] = Stop [Enter] = Execute

PRESS ENTER KEY, then adjustment is started.



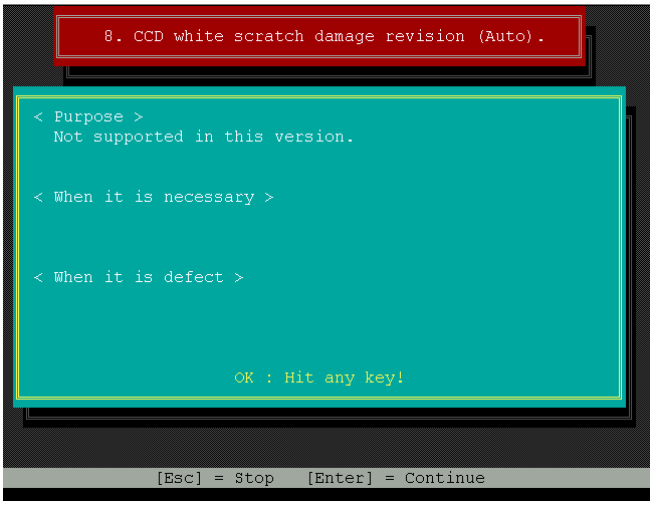
When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.

9. Press the “CAM_RESET” SW on VFK1308P, and then press the “Enter” key.

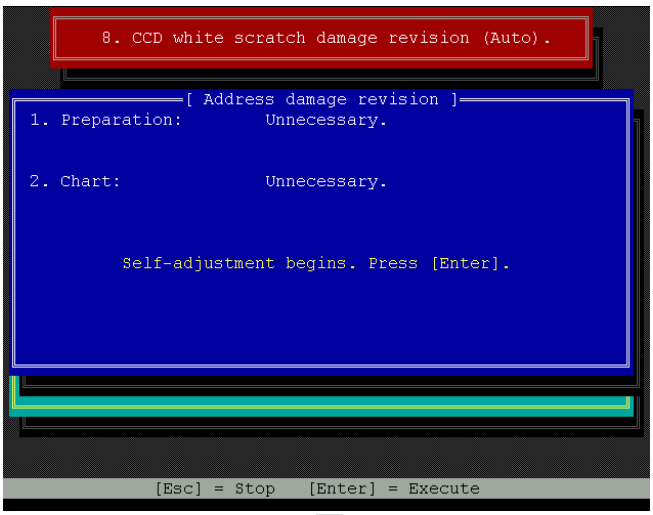
6-6. CCD white scratch damage revision Adjustment (AUTO)

This adjustment can be adjust automatically.

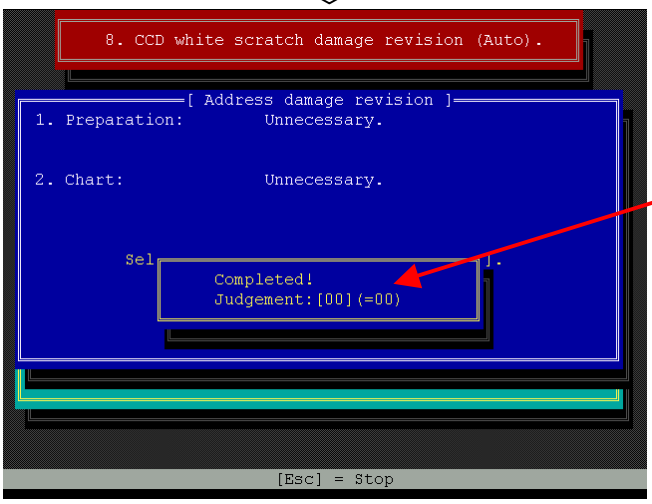
1. Open the “Camera adjustment menu”.
2. Select “8.CCD white scratch damage revision adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
3. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.


8. CCD white scratch damage revision (Auto).
[Address damage revision]
1. Preparation: Unnecessary.
2. Chart: Unnecessary.
Self-adjustment begins. Press [Enter].
[Esc] = Stop [Enter] = Execute

PRESS ENTER KEY, then adjustment is started.

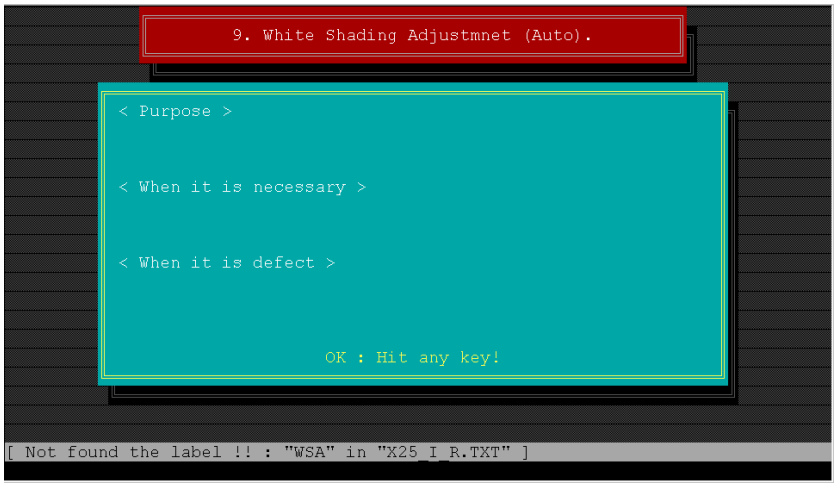


When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

6-7. White Shading Adjustment

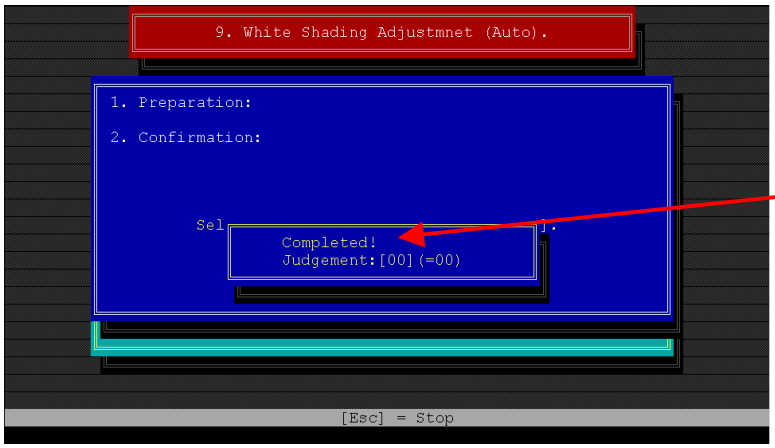
This adjustment can be adjust automatically.

1. Set the GAIN SW to L (0dB) of AG-DVX100.
2. Open the SW mode menu in CAMERA menu.
3. Select the item “ATW” and set to OFF.
4. Open the SCENE FILE menu in CAMERA menu.
5. Confirm that the set to OFF on item PROGRESSIVE in SCENE FILE menu.
6. Aim the unit at white paper (it can be use clear white paper) under the Halogen lamp condition.
7. Shoot the white paper to become fully screen.
8. Set the White Balance by press AWB SW and confirm that the message “AWB OK” on center of screen.
9. Open the DISPLAY SETUP menu in CAMERA menu.
10. Select the item “MARKER” and set to ON.
11. Press the ZEBRA SW and confirm that the marker is appears on screen.
12. Adjust the Iris dial to the luminance level to become 70 to 80% (luminance level can be confirm by numerical value, which displayed lower left corner of screen.
13. Open the “Camera adjustment menu”.
14. Select “9.White Shading Adjustment (Auto)” in the Camera adjustment menu, and then press the “Enter” key.
15. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.



PRESS ENTER KEY.

PRESS ENTER KEY, then adjustment is started.



When adjustment is finished, message “Completed!” appeared and numerical value is changed “00”.
The program goes to Camera adjustment menu automatically.

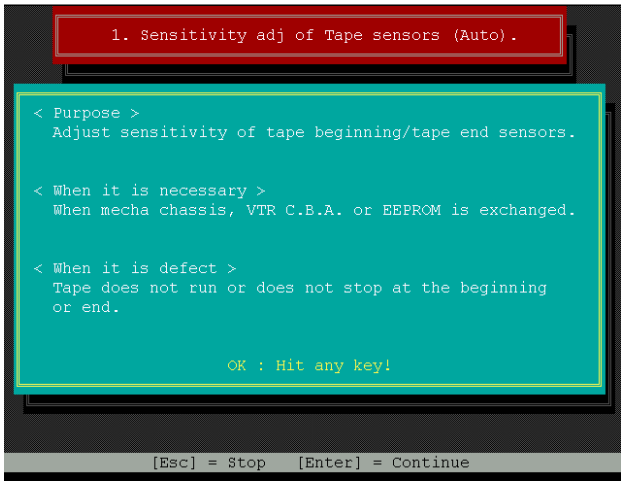
7. VTR ADJUSTMENT PROCEDURE

Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.
Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

7-1. Sensitivity adj of Tape sensors Adjustment (AUTO)

This adjustment can be adjust automatically.

1. Insert the Tape End/Beg. Sensor Cassette (VFK1217) into the Unit.
2. Open the “Video adjustment menu”.
3. Select “1.Sensitivity adj of Tape sensors (Auto)” in the Video adjustment menu, and then press the “Enter” key.

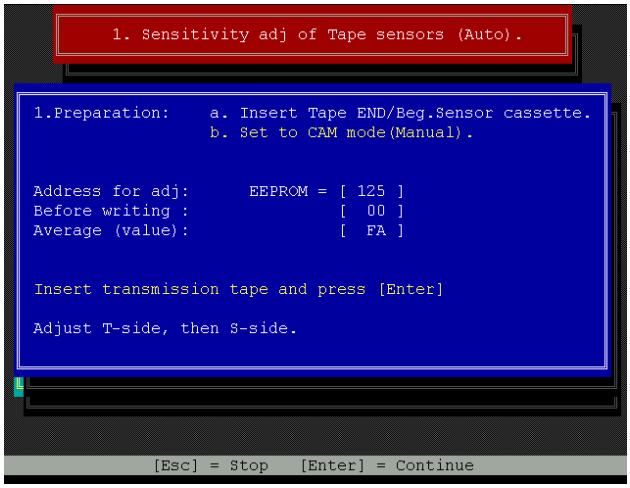

1. Sensitivity adj of Tape sensors (Auto).
< Purpose >
Adjust sensitivity of tape beginning/tape end sensors.
< When it is necessary >
When mecha chassis, VTR C.B.A. or EEPROM is exchanged.
< When it is defect >
Tape does not run or does not stop at the beginning
or end.
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

PRESS ENTER KEY.

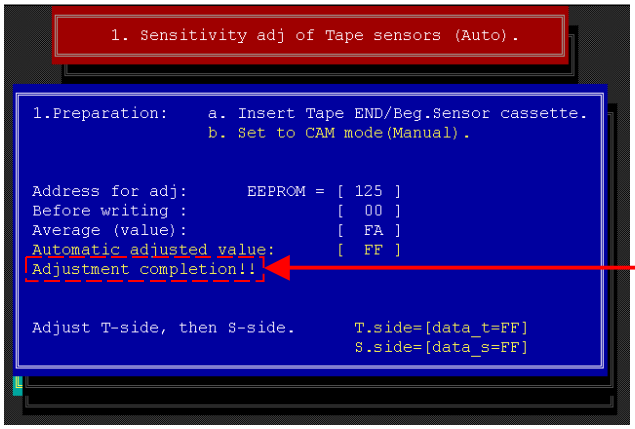
1. Sensitivity adj of Tape sensors (Auto).
< Purpose >
Adjust sensitivity of tape beginning/tape end sensors.
Open the door with the open lever in
the cassette unit because it up.
Continue : [Enter]. Interrupt : [Esc]
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

Unnecessary open the door, PRESS ENTER KEY.

4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.


1. Sensitivity adj of Tape sensors (Auto).
1.Preparation: a. Insert Tape END/Beg.Sensor cassette.
b. Set to CAM mode(Manual).
Address for adj: EEPROM = [125]
Before writing : [00]
Average (value): [FA]
Insert transmission tape and press [Enter]
Adjust T-side, then S-side.
[Esc] = Stop [Enter] = Continue

In case of the “Tape END/Beg. Sensor cassette(VFK1217) is already inserted, PRESS ENTER KEY.

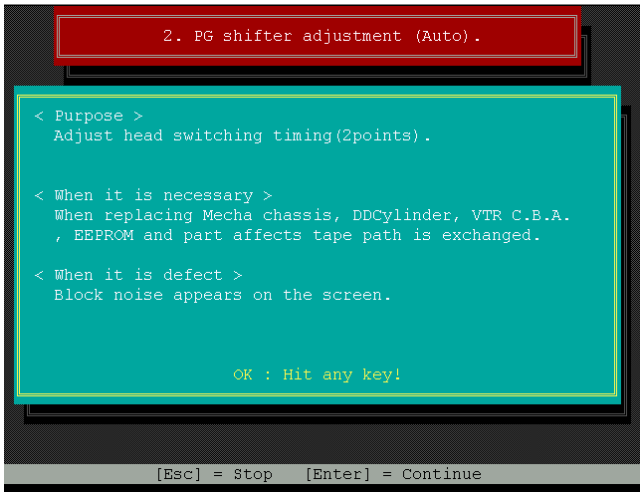

1. Sensitivity adj of Tape sensors (Auto).
1.Preparation: a. Insert Tape END/Beg.Sensor cassette.
b. Set to CAM mode(Manual).
Address for adj: EEPROM = [125]
Before writing : [00]
Average (value): [FA]
Automatic adjusted value: [FF]
Adjustment completion!!
Adjust T-side, then S-side.
T.side=[data_t=FF]
S.side=[data_s=FF]

Please confirm this message appeared on screen, then adjustment is finished.

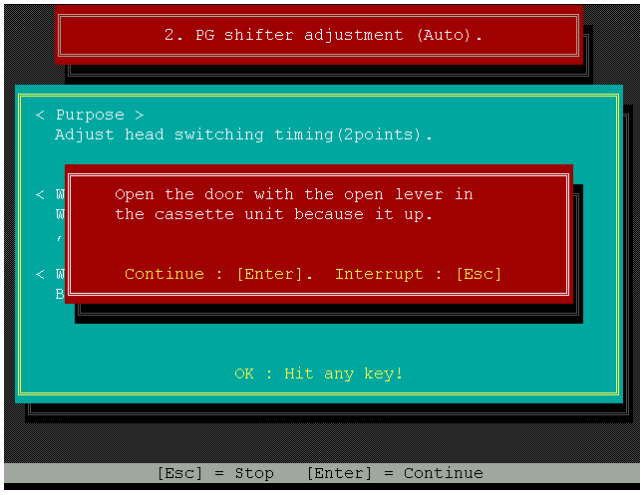
7-2. PG shifter Adjustment (AUTO)

This adjustment can be adjust automatically.

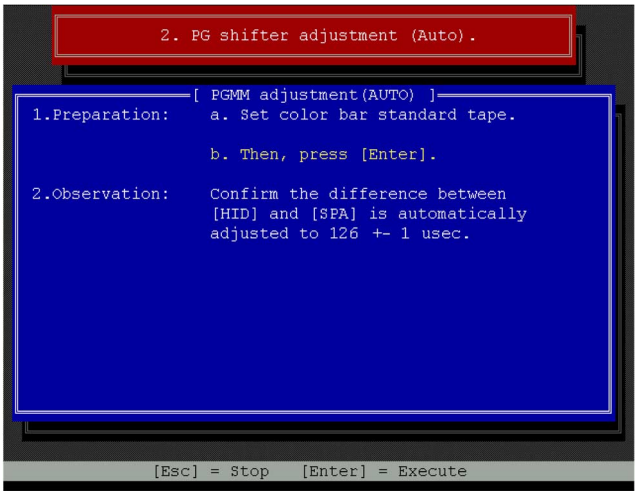
1. Connect the oscilloscope to “HID” and “SPA” on the VFK1308P.
2. Insert the DV color bar alignment tape(VFM3010EDS) into the Unit.
3. Open the “Video adjustment menu”.
4. Select “2.PG shifter adjustment (Auto)” in the Video adjustment menu, and then press the “Enter” key.
5. Set to VCR mode in AG-DVX100 follow the message ”Manually set to VCR mode.”, and then press the “Enter” key.


2. PG shifter adjustment (Auto).
< Purpose >
Adjust head switching timing(2points).
< When it is necessary >
When replacing Mecha chassis, DDCylinder, VTR C.B.A.
, EEPROM and part affects tape path is exchanged.
< When it is defect >
Block noise appears on the screen.
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

PRESS ENTER KEY.

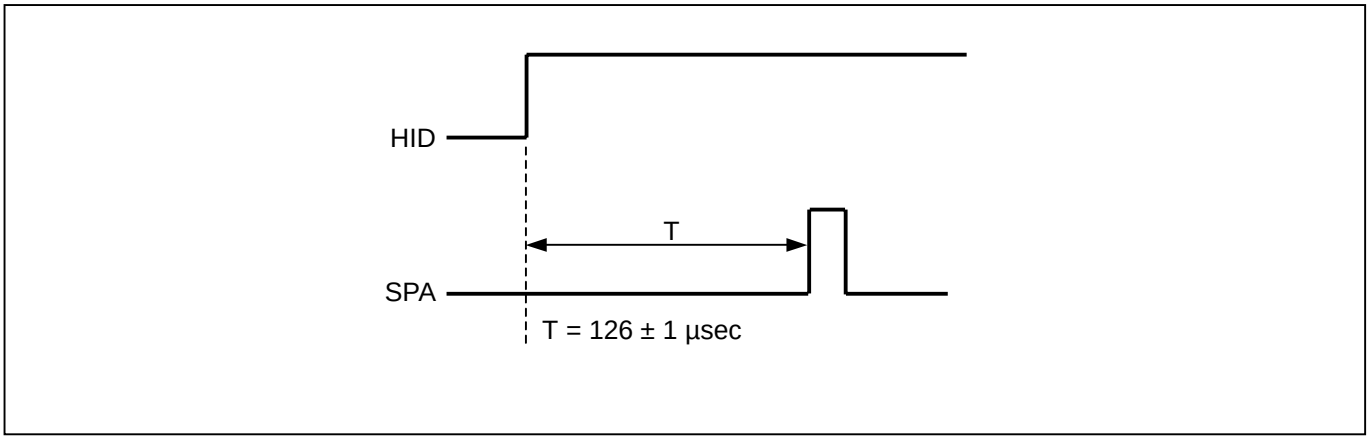

2. PG shifter adjustment (Auto).
< Purpose >
Adjust head switching timing(2points).
Open the door with the open lever in
the cassette unit because it up.
Continue : [Enter]. Interrupt : [Esc]
OK : Hit any key!
[Esc] = Stop [Enter] = Continue

Unnecessary open the door, PRESS ENTER KEY.


2. PG shifter adjustment (Auto).
[PGMM adjustment(AUTO)]
1.Preparation: a. Set color bar standard tape.
b. Then, press [Enter].
2.Observation: Confirm the difference between [HID] and [SPA] is automatically adjusted to 126 +- 1 usec.
[Esc] = Stop [Enter] = Execute

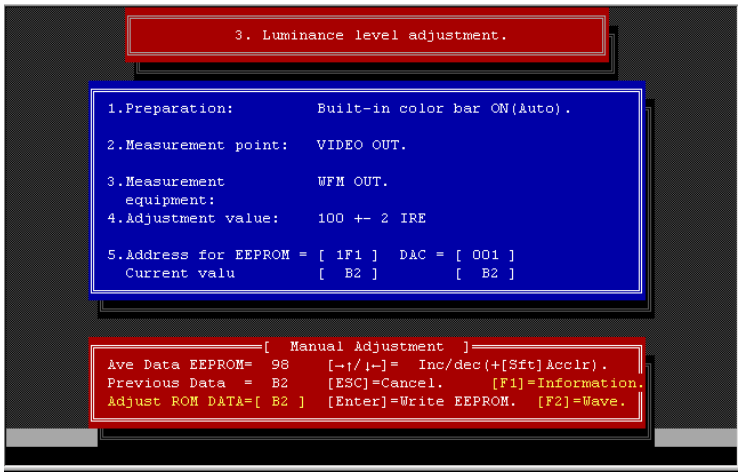
In case of the “DV color bar alignment tape (VFM3010EDS) is already inserted, PRESS ENTER KEY, then adjustment is started.

After finish adjustment, please confirm portion “T” is within the specification as shown in figure.



7-3. Luminance level Adjustment

1. Connect the WFM to VIDEO OUT.
2. Open the “Video adjustment menu”.
3. Select “3.Luminance level adjustment” in the Video adjustment menu, and then press the “Enter” key.
4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.


3. Luminance level adjustment.
1.Preparation: Built-in color bar ON(Auto).
2.Measurement point: VIDEO OUT.
3.Measurement equipment: WFM OUT.
4.Adjustment value: 100 +- 2 IRE
5.Address for EEPROM = [1F1] DAC = [001]
Current valu [B2] [B2]
[Manual Adjustment]
Ave Data EEPROM= 98 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = B2 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[B2] [Enter]=Write EEPROM. [F2]=Wave.

5. Adjust the Y level to become 100±2 IRE by press arrow keys.

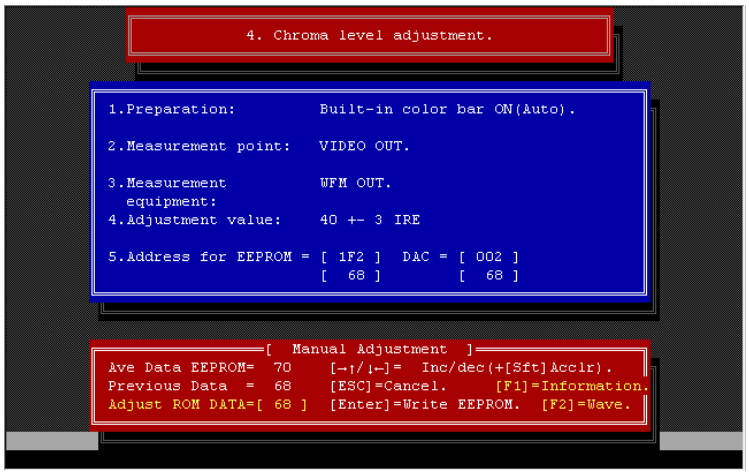
Note:

1) Y level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

7-4. Chroma level Adjustment

1. Connect the WFM to VIDEO OUT.
2. Open the “Video adjustment menu”.
3. Select “4.Chroma level adjustment” in the Video adjustment menu, and then press the “Enter” key.
4. Set to CAMERA mode in AG-DVX100 follow the message ”Manually set to CAMERA mode.”, and then press the “Enter” key.


4. Chroma level adjustment.
1.Preparation: Built-in color bar ON(Auto).
2.Measurement point: VIDEO OUT.
3.Measurement equipment: WFM OUT.
4.Adjustment value: 40 +- 3 IRE
5.Address for EEPROM = [1F2] DAC = [002]
[68] [68]
[Manual Adjustment]
Ave Data EEPROM= 70 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 68 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[68] [Enter]=Write EEPROM. [F2]=Wave.

5. Adjust the C level to become 40±3 IRE by press arrow keys.

Note:

1) C level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8. LCD ADJUSTMENT PROCEDURE

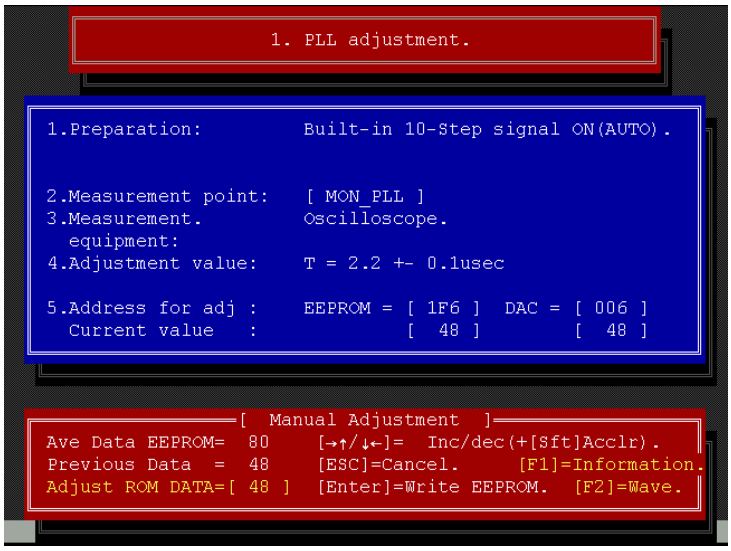
Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.

Perform the all PC-EVR adjustments, by referring to procedures on PC screen.

Note: Set to CAMERA mode in AG-DVX100.

8-1. PLL Adjustment

1. Connect the oscilloscope to “NON_PLL” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “1.PLL adjustment” in the LCD adjustment menu, and then press the “Enter” key.


1. PLL adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_PLL]
3.Measurement. Oscilloscope.
equipment:
4.Adjustment value: T = 2.2 +- 0.1usec
5.Address for adj : EEPROM = [1F6] DAC = [006]
Current value : [48] [48]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 48 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[48] [Enter]=Write EEPROM. [F2]=Wave.

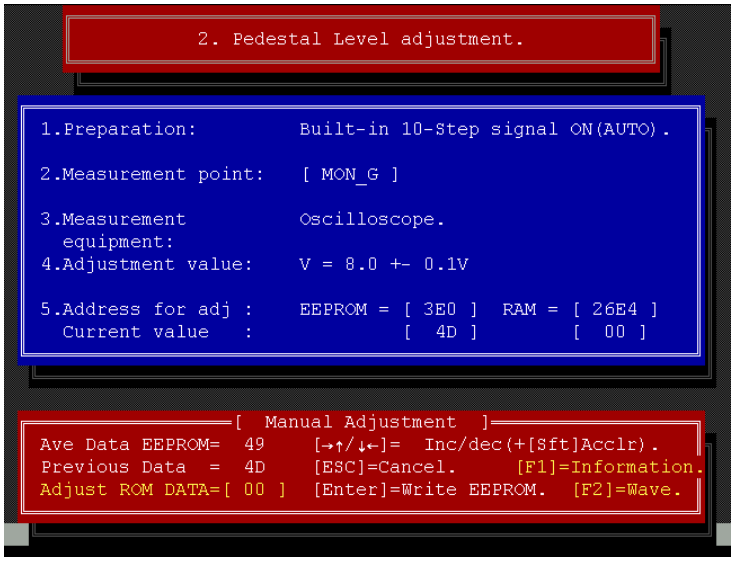
4. Adjust the width (T) to become 2.2±0.1µsec as shown in figure.

Note:

1) Width (T) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-2. Pedestal Level Adjustment

1. Connect the oscilloscope to “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “1.PLL adjustment” in the LCD adjustment menu, and then press the “Enter” key.


2. Pedestal Level adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_G]
3.Measurement Oscilloscope.
equipment:
4.Adjustment value: V = 8.0 +- 0.1V
5.Address for adj : EEPROM = [3E0] RAM = [26E4]
Current value : [4D] [00]
[Manual Adjustment]
Ave Data EEPROM= 49 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 4D [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

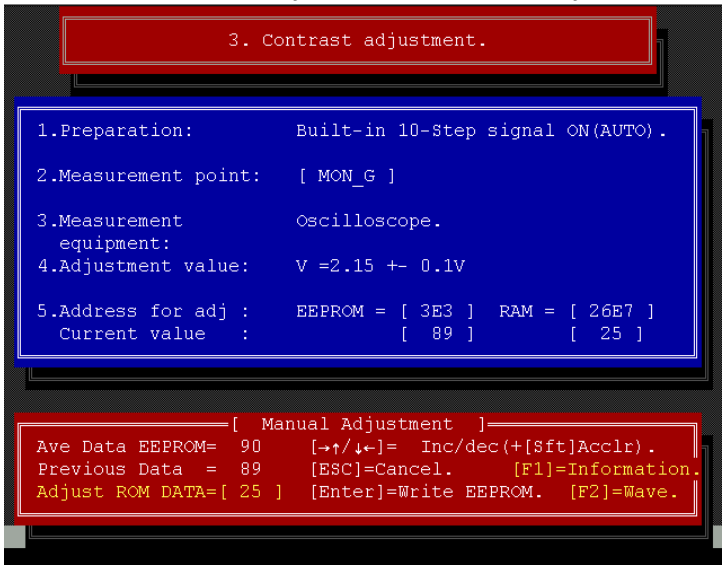
4. Adjust the differential amplitude both 0 step-level (portion “a” in figure) to become 8.0±0.1V as shown in figure.

Note:

1) Level (a) can be by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-3. Contrast Adjustment

1. Connect the oscilloscope to “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “3.Contrast adjustment” in the LCD adjustment menu, and then press the “Enter” key.


3. Contrast adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: V =2.15 +- 0.1V
5.Address for adj : EEPROM = [3E3] RAM = [26E7]
Current value : [89] [25]
[Manual Adjustment]
Ave Data EEPROM= 90 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 89 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[25] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust the differential amplitude between 0 step-level and 7 step-level (portion “V” in figure) to become 2.15±0.1V as shown in figure.

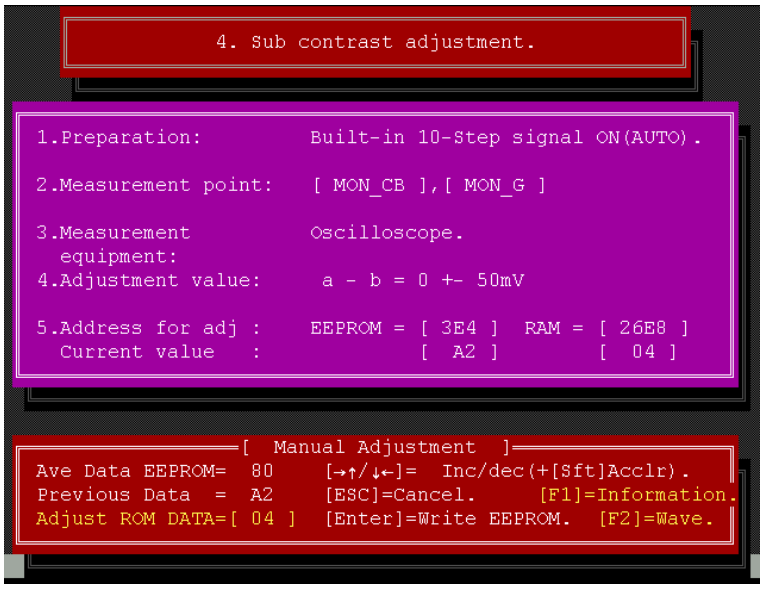
Note:

1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-4. Sub contrast Adjustment

1. Connect the oscilloscope to “MON_CB” and “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “4.Sub contrast adjustment” in the LCD adjustment menu, and then press the “Enter” key.

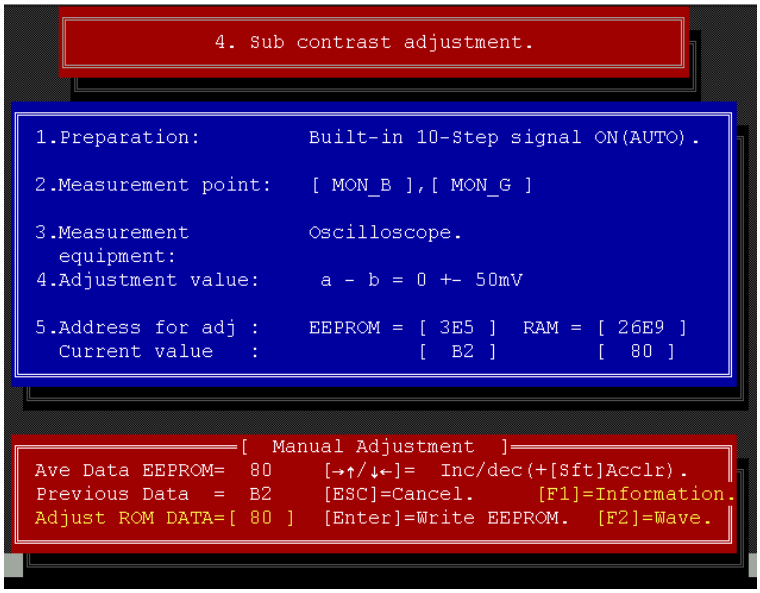

4. Sub contrast adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_CB],[MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: a - b = 0 +- 50mV
5.Address for adj : EEPROM = [3E4] RAM = [26E8]
Current value : [A2] [04]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = A2 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[04] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust level difference between “a” (MON_CB) and “b” (MON_G) to become 0±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.


4. Sub contrast adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_B],[MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: a - b = 0 +- 50mV
5.Address for adj : EEPROM = [3E5] RAM = [26E9]
Current value : [B2] [80]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = B2 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[80] [Enter]=Write EEPROM. [F2]=Wave.

6. Connect the oscilloscope to “MON_B” and “MON_G” on the VFK1308P.
7. Adjust level difference between “a” (MON_B) and “b” (MON_G) to become 0±50mV as shown in figure.

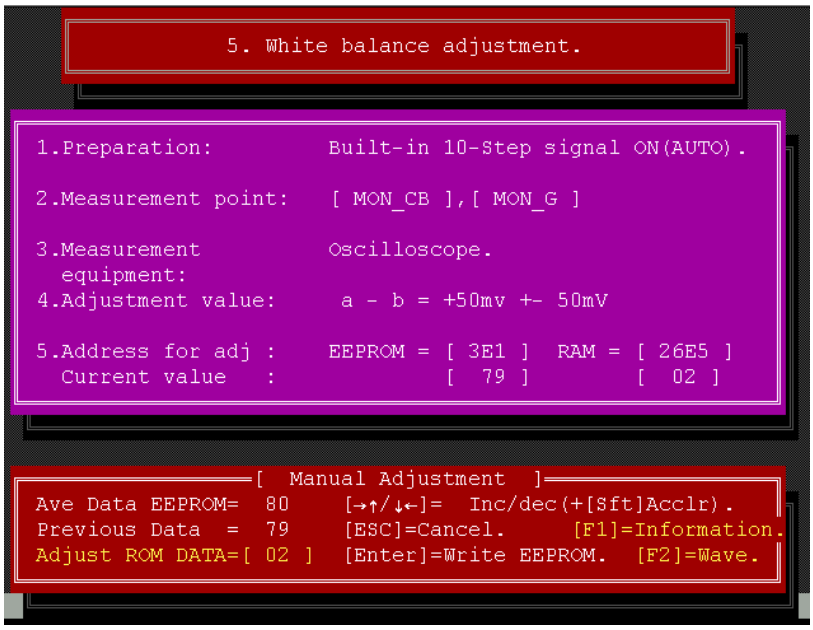
Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

8. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

8-5. White balance Adjustment

1. Connect the oscilloscope to “MON_CB” and “MON_G” on the VFK1308P.
2. Open the “LCD adjustment menu”.
3. Select “5.White balance adjustment” in the LCD adjustment menu, and then press the “Enter” key.

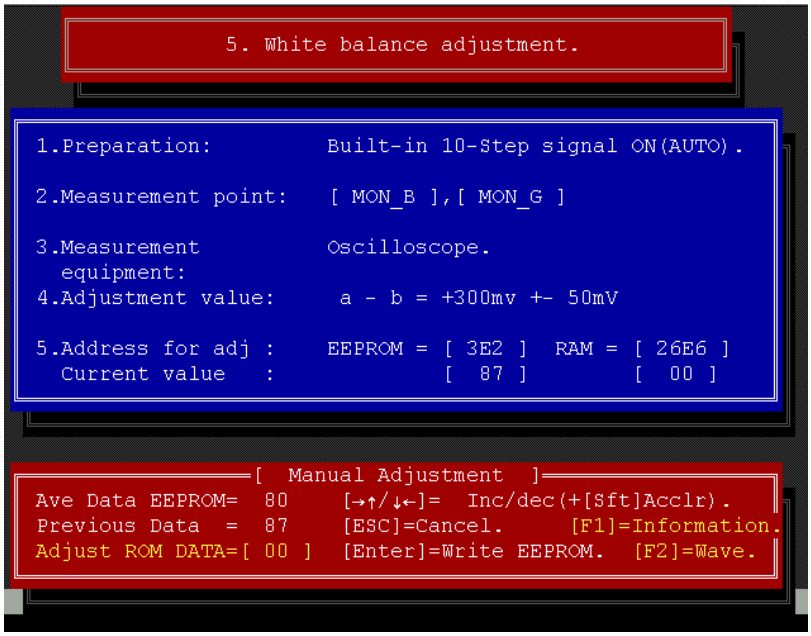

5. White balance adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_CB],[MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: a - b = +50mv +- 50mV
5.Address for adj : EEPROM = [3E1] RAM = [26E5]
Current value : [79] [02]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 79 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[02] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust level difference between “a” (MON_CB) and “b” (MON_G) to become +50mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.


5. White balance adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [MON_B],[MON_G]
3.Measurement equipment: Oscilloscope.
4.Adjustment value: a - b = +300mv +- 50mV
5.Address for adj : EEPROM = [3E2] RAM = [26E6]
Current value : [87] [00]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 87 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

6. Connect the oscilloscope to “MON_B” and “MON_G” on the VFK1308P.
7. Adjust level difference between “a” (MON_B) and “b” (MON_G) to become +300mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

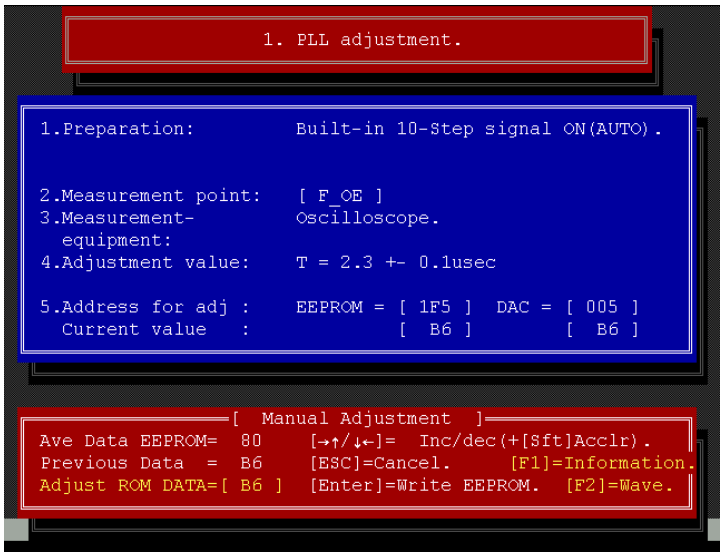
8. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9. EVF ADJUSTMENT PROCEDURE

Be sure to save the VTR EEPROM data into the Personal Computer, before performing adjustment.
Perform the all PC-EVR adjustments, by referring to procedures on PC screen.
Note: Set to CAMERA mode in AG-DVX100.

9-1. EVF PLL Adjustment

1. Connect the oscilloscope to “F_OE” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “1.PLL adjustment” in the EVF adjustment menu, and then press the “Enter” key.

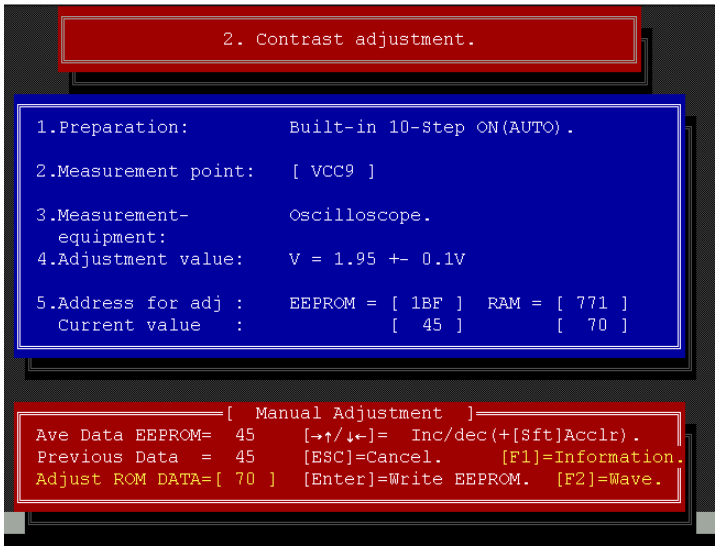

1. PLL adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [F_OE]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: T = 2.3 +- 0.1usec
5.Address for adj : EEPROM = [1F5] DAC = [005]
Current value : [B6] [B6]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = B6 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[B6] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust the width (T) to become 2.3±0.1µsec as shown in figure.

Note:
1) Width (T) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-2. EVF Contrast Adjustment

1. Connect the oscilloscope to “VCC9” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “2.Contrast adjustment” in the EVF adjustment menu, and then press the “Enter” key.

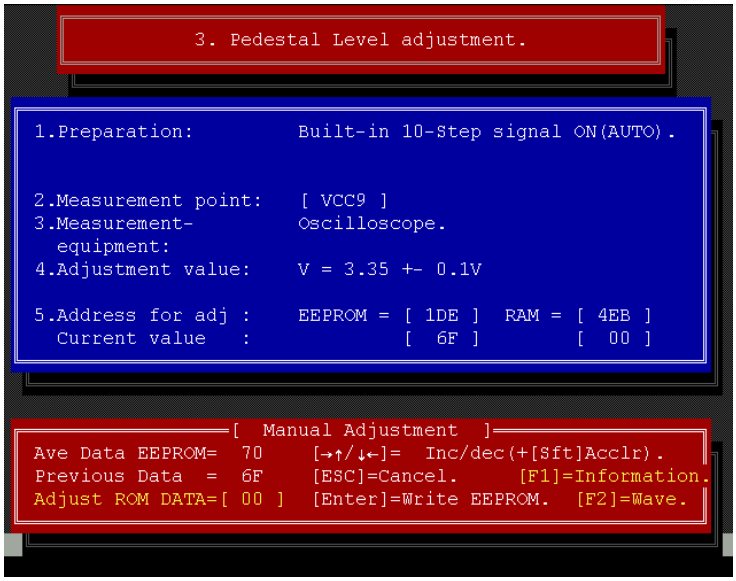

2. Contrast adjustment.
1.Preparation: Built-in 10-Step ON(AUTO).
2.Measurement point: [VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: V = 1.95 +- 0.1V
5.Address for adj : EEPROM = [1BF] RAM = [771]
Current value : [45] [70]
[Manual Adjustment]
Ave Data EEPROM= 45 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 45 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[70] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust the differential amplitude between 1 step-level and 10 step-level (portion “V” in figure) to become 1.95±0.1V as shown in figure.

Note:
1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.
5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-3. EVF Pedestal Level Adjustment

1. Connect the oscilloscope to “VCC9” on the VFK1308P.
2. Open the “EVF adjustment menu”.
3. Select “3.Pedestal Level adjustment” in the EVF adjustment menu, and then press the “Enter” key.


3. Pedestal Level adjustment.
1.Preparation: Built-in 10-Step signal ON(AUTO).
2.Measurement point: [VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: V = 3.35 +- 0.1V
5.Address for adj : EEPROM = [1DE] RAM = [4EB]
Current value : [6F] [00]
[Manual Adjustment]
Ave Data EEPROM= 70 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 6F [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

4. Adjust the differential amplitude both 10 step-level (portion “V” in figure) to become 3.35±0.1V as shown in figure.

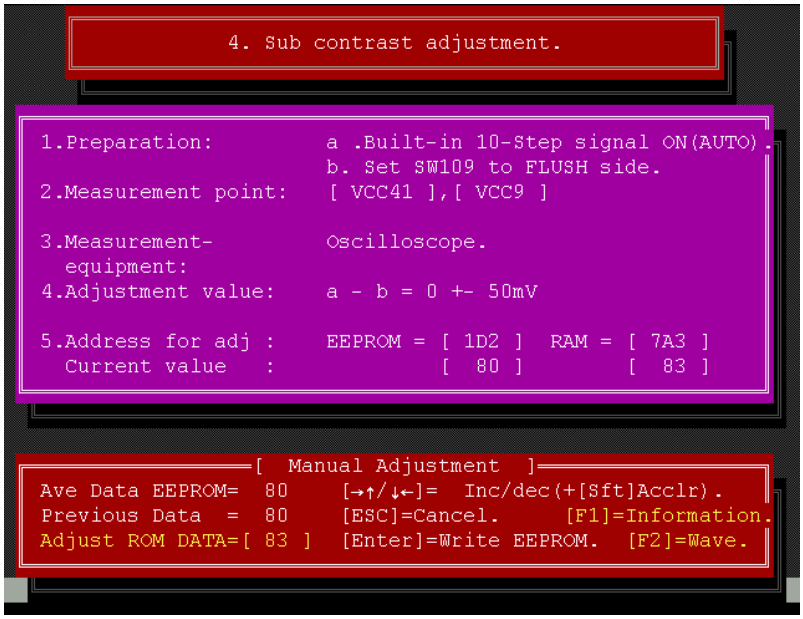
Note:

1) Level (V) can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

5. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-4. EVF Sub contrast Adjustment

1. Set SW109 to “FLUSH” side on the VFK1308P.
2. Connect the oscilloscope to “VCC41” and “VCC9” on the VFK1308P.
3. Open the “EVF adjustment menu”.
4. Select “4.Sub contrast adjustment” in the EVF adjustment menu, and then press the “Enter” key.

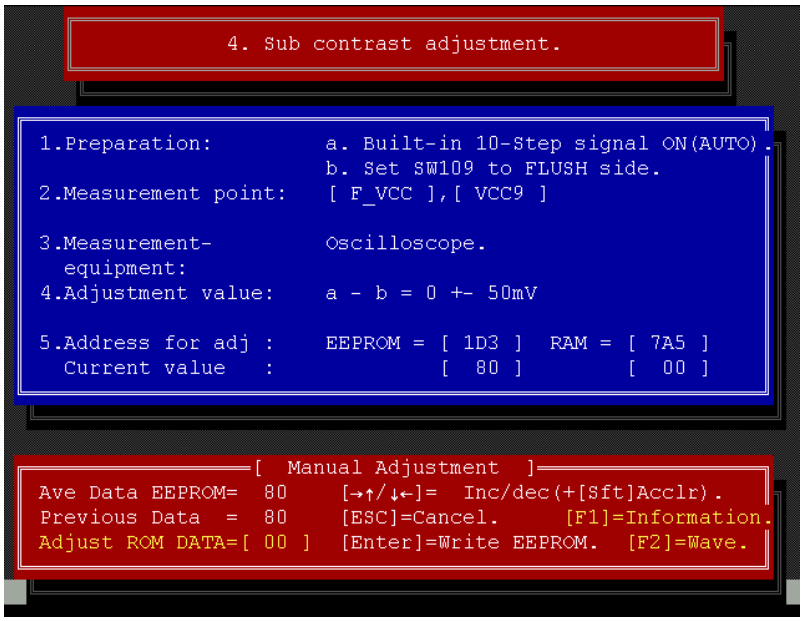

4. Sub contrast adjustment.
1.Preparation: a .Built-in 10-Step signal ON(AUTO).
b. Set SW109 to FLUSH side.
2.Measurement point: [VCC41],[VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: a - b = 0 +- 50mV
5.Address for adj : EEPROM = [1D2] RAM = [7A3]
Current value : [80] [83]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 80 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[83] [Enter]=Write EEPROM. [F2]=Wave.

5. Adjust level difference between “a” (VCC41) and “b” (VCC9) to become 0±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.


4. Sub contrast adjustment.
1.Preparation: a. Built-in 10-Step signal ON(AUTO).
b. Set SW109 to FLUSH side.
2.Measurement point: [F_VCC],[VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: a - b = 0 +- 50mV
5.Address for adj : EEPROM = [1D3] RAM = [7A5]
Current value : [80] [00]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 80 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

7. Connect the oscilloscope to “F_VCC” and “VCC9” on the VFK1308P.
8. Adjust level difference between “a” (F_VCC) and “b” (VCC9) to become 0±50mV as shown in figure.

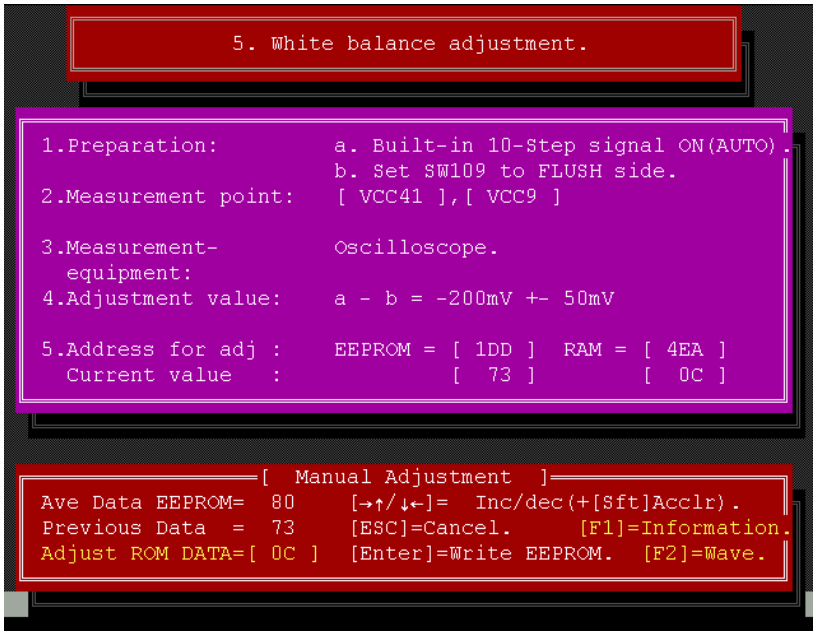
Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

9. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

9-5. EVF White balance Adjustment

1. Set SW109 to “FLUSH” side on the VFK1308P.
2. Connect the oscilloscope to “VCC41” and “VCC9” on the VFK1308P.
3. Open the “EVF adjustment menu”.
4. Select “5.White balance adjustment” in the EVF adjustment menu, and then press the “Enter” key.

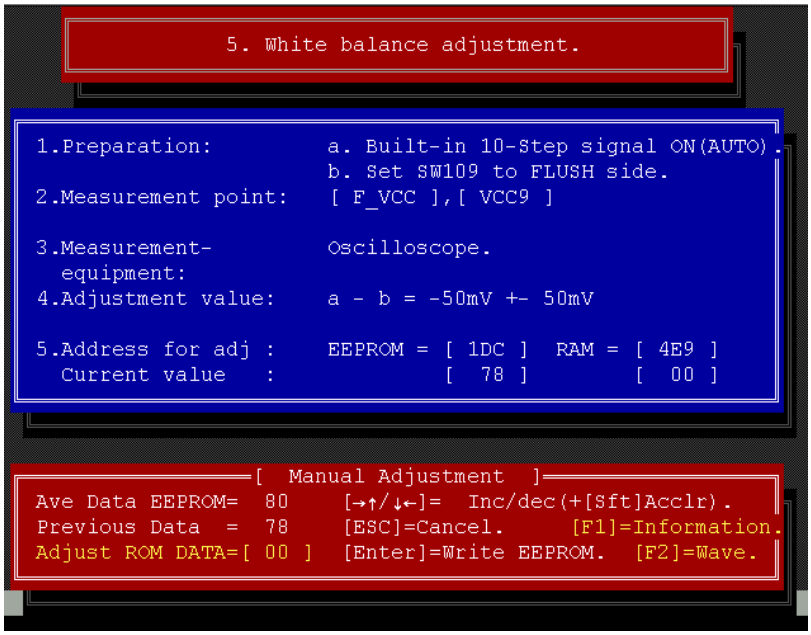

5. White balance adjustment.
1.Preparation: a. Built-in 10-Step signal ON(AUTO).
b. Set SW109 to FLUSH side.
2.Measurement point: [VCC41],[VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: a - b = -200mV +- 50mV
5.Address for adj : EEPROM = [1DD] RAM = [4EA]
Current value : [73] [0C]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 73 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[0C] [Enter]=Write EEPROM. [F2]=Wave.

5. Adjust level difference between “a” (VCC41) and “b” (VCC9) to become -200mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

6. When adjustment is finished, press ENTER key to adjusted data write to EEPROM, then change the display indicated as below.


5. White balance adjustment.
1.Preparation: a. Built-in 10-Step signal ON(AUTO).
b. Set SW109 to FLUSH side.
2.Measurement point: [F_VCC],[VCC9]
3.Measurement- Oscilloscope.
equipment:
4.Adjustment value: a - b = -50mV +- 50mV
5.Address for adj : EEPROM = [1DC] RAM = [4E9]
Current value : [78] [00]
[Manual Adjustment]
Ave Data EEPROM= 80 [→↑/↓←]= Inc/dec(+[Sft]Acclr).
Previous Data = 78 [ESC]=Cancel. [F1]=Information.
Adjust ROM DATA=[00] [Enter]=Write EEPROM. [F2]=Wave.

7. Connect the oscilloscope to “F_VCC” and “VCC9” on the VFK1308P.
8. Adjust level difference between “a” (F_VCC) and “b” (VCC9) to become –50mV±50mV as shown in figure.

Note:

1) Signal level can be adjusted by press arrow keys on keyboard.
2) Waveform (figure) can be displayed by press F2 key.

9. When adjustment is finished, press ENTER key to adjusted data write to EEPROM.

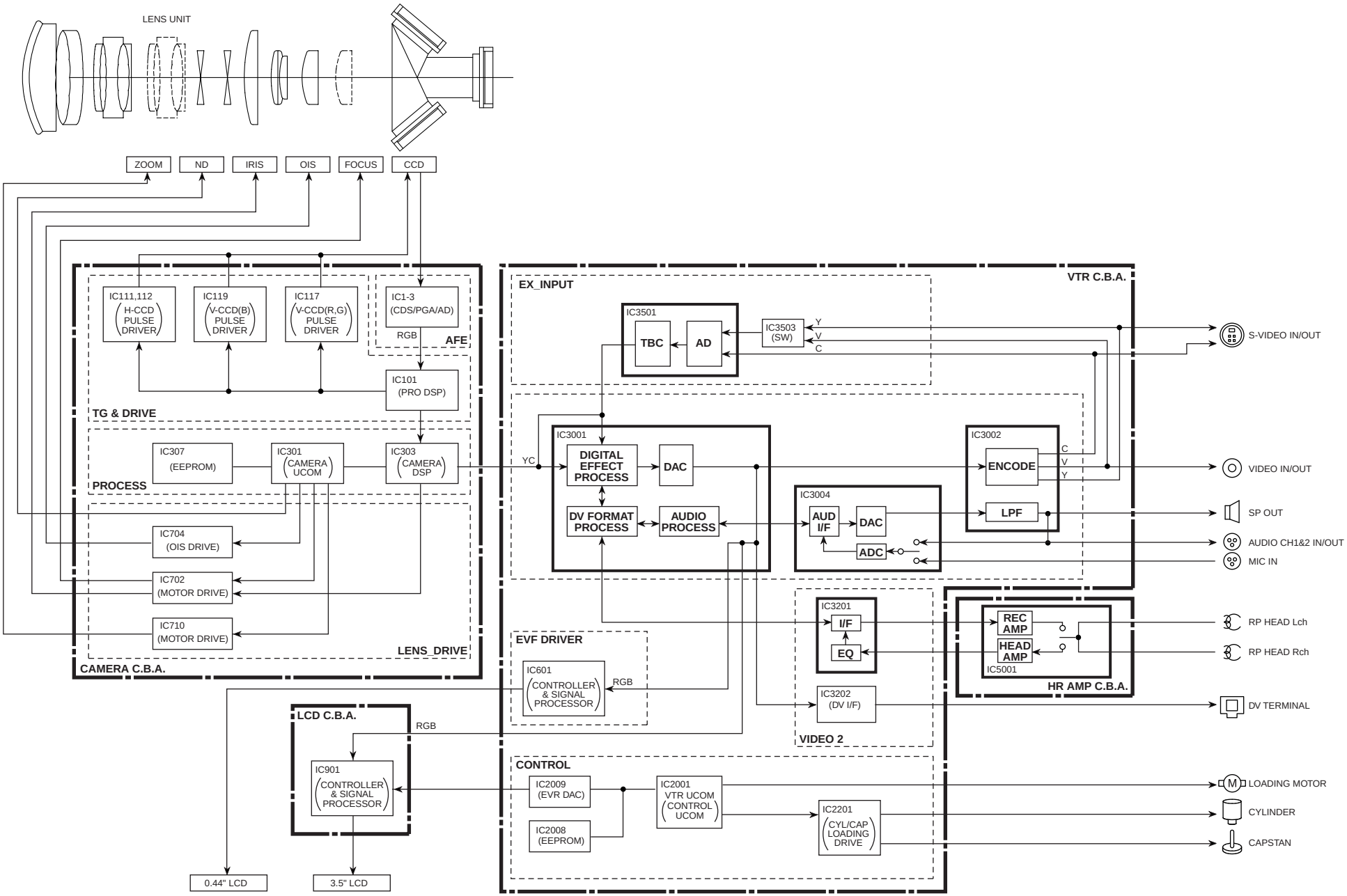
SECTION 5

BLOCK DIAGRAMS

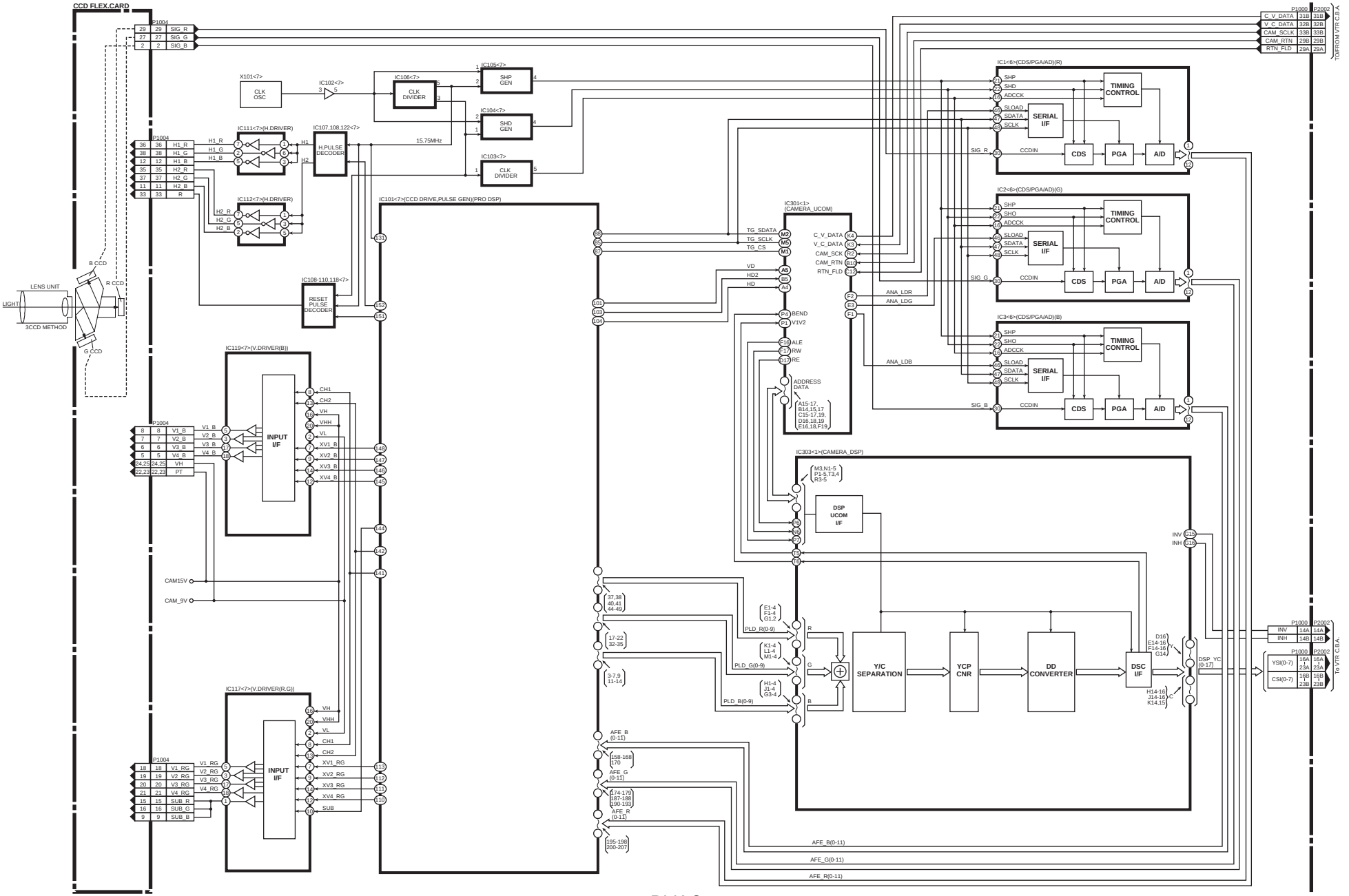
CONTENTS

OVERALL BLOCK DIAGRAM.....BLK-1
SENSOR/PROCESS (AFE / TG & DRIVE / PROCESS) BLOCK DIAGRAM.....BLK-2
LENS DRIVE (LENS DRIVE / PROCESS) BLOCK DIAGRAM BLK-3
VIDEO (VIDEO 1/ VIDEO 2/ EX_INPUT) BLOCK DIAGRAM BLK-4
MONITOR (EVF DRIVER / LCD) BLOCK DIAGRAM.....BLK-5
CONTROL (CONTROL/DRIVE) BLOCK DIAGRAM BLK-6

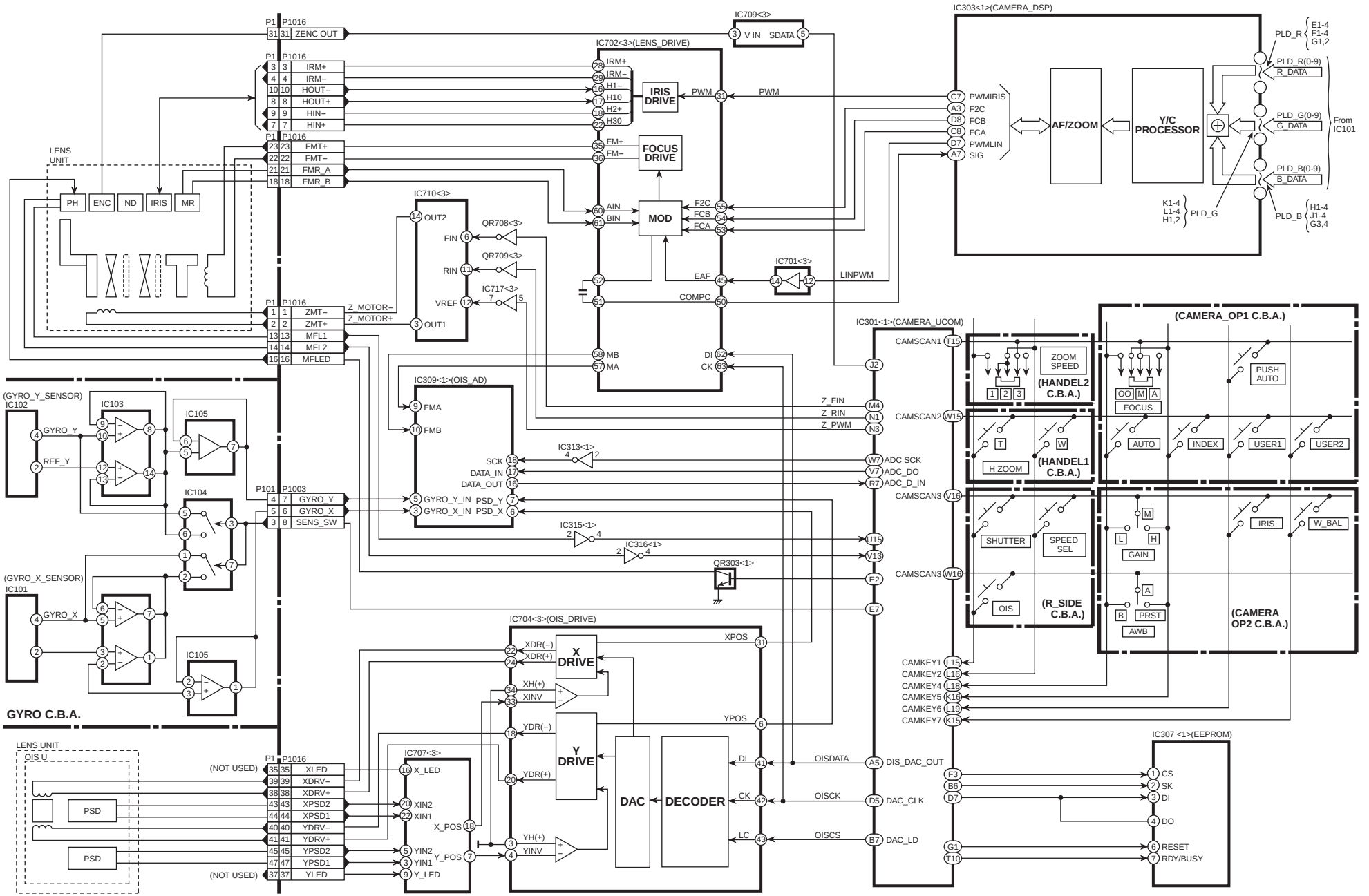
OVERALL BLOCK DIAGRAM



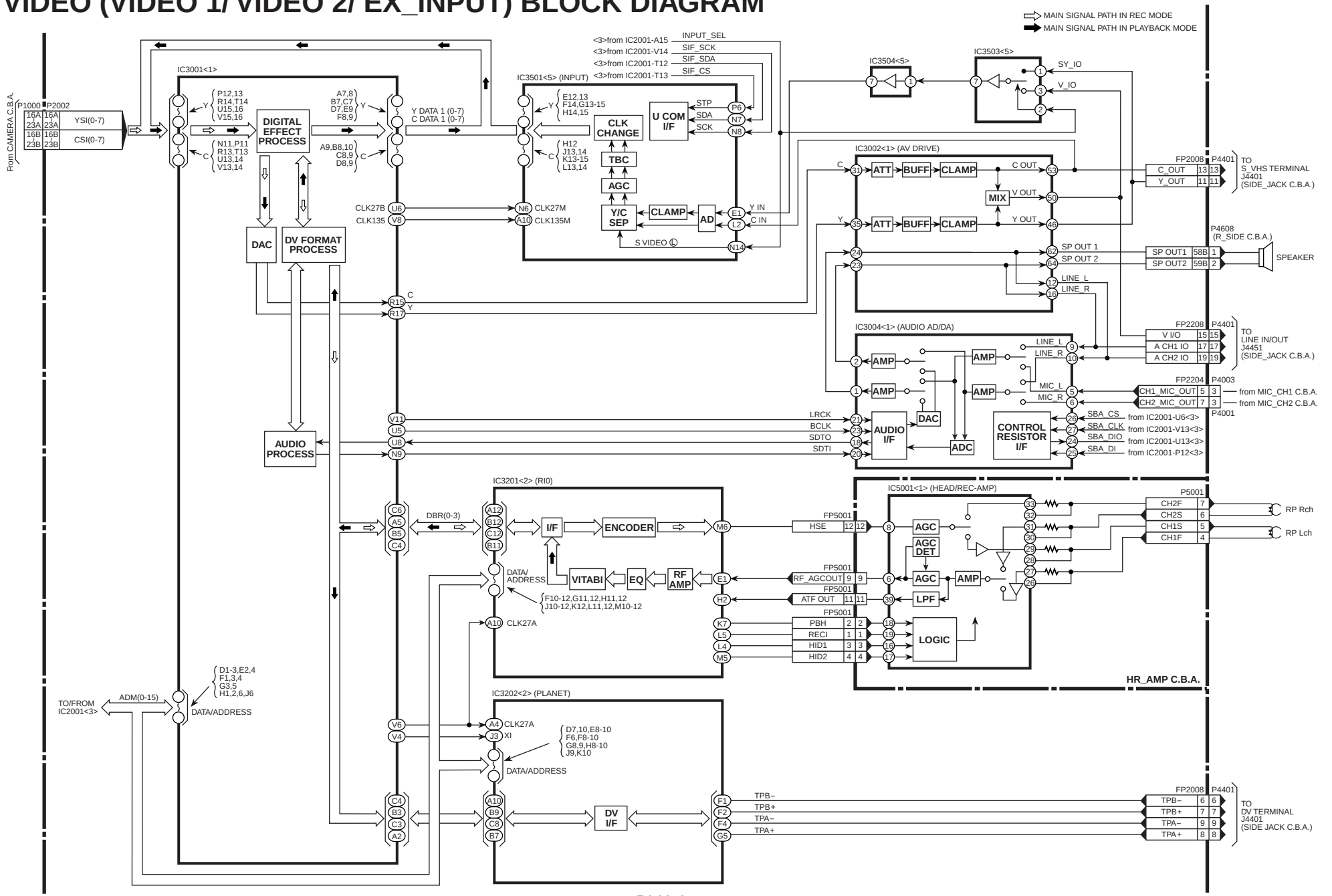
SENSOR/PROCESS(AFE/TG&DRIVE/PROCESS) BLOCK DIAGRAM



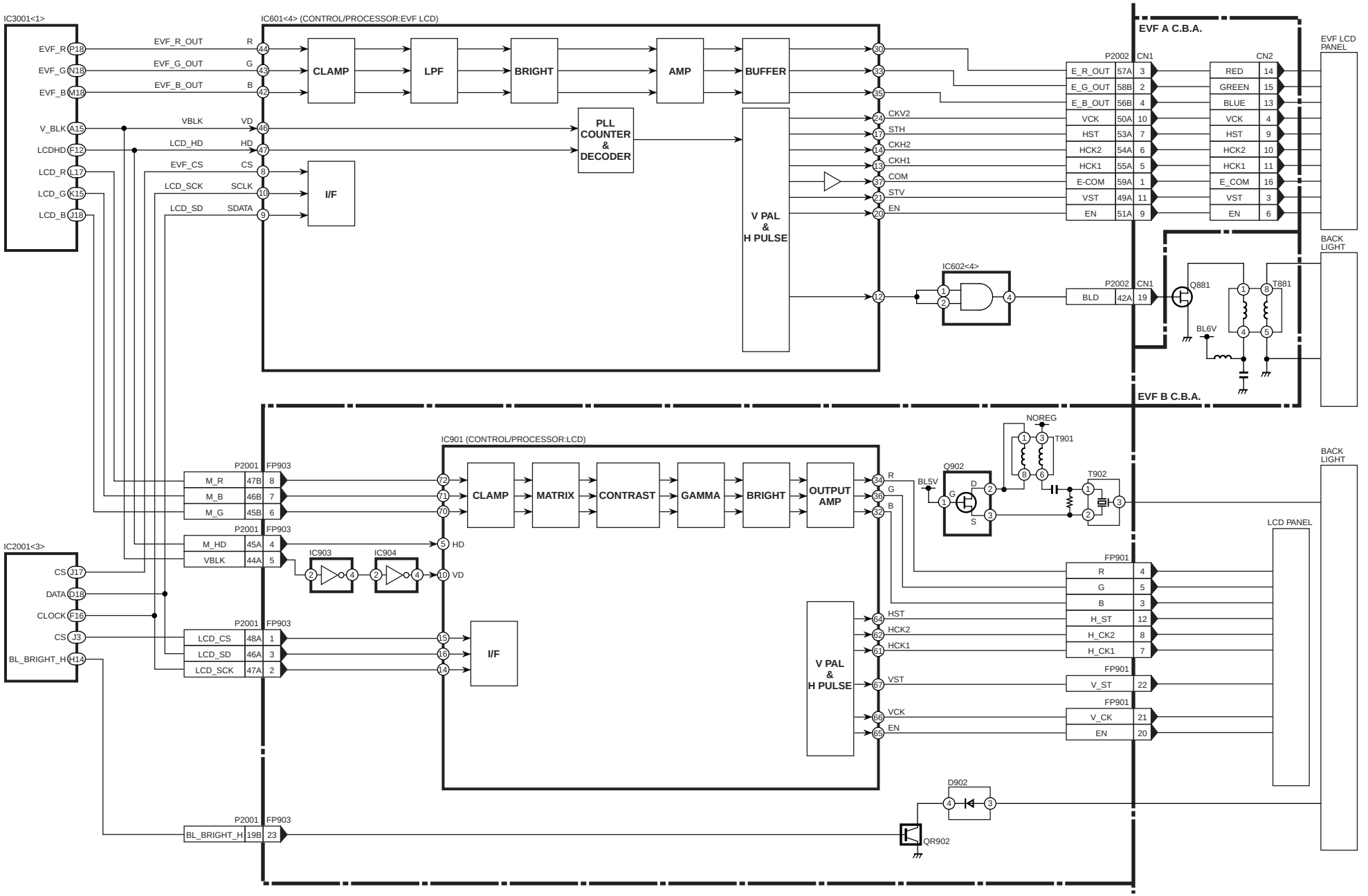
LENS DRIVE (LENS DRIVE / PROCESS) BLOCK DIAGRAM



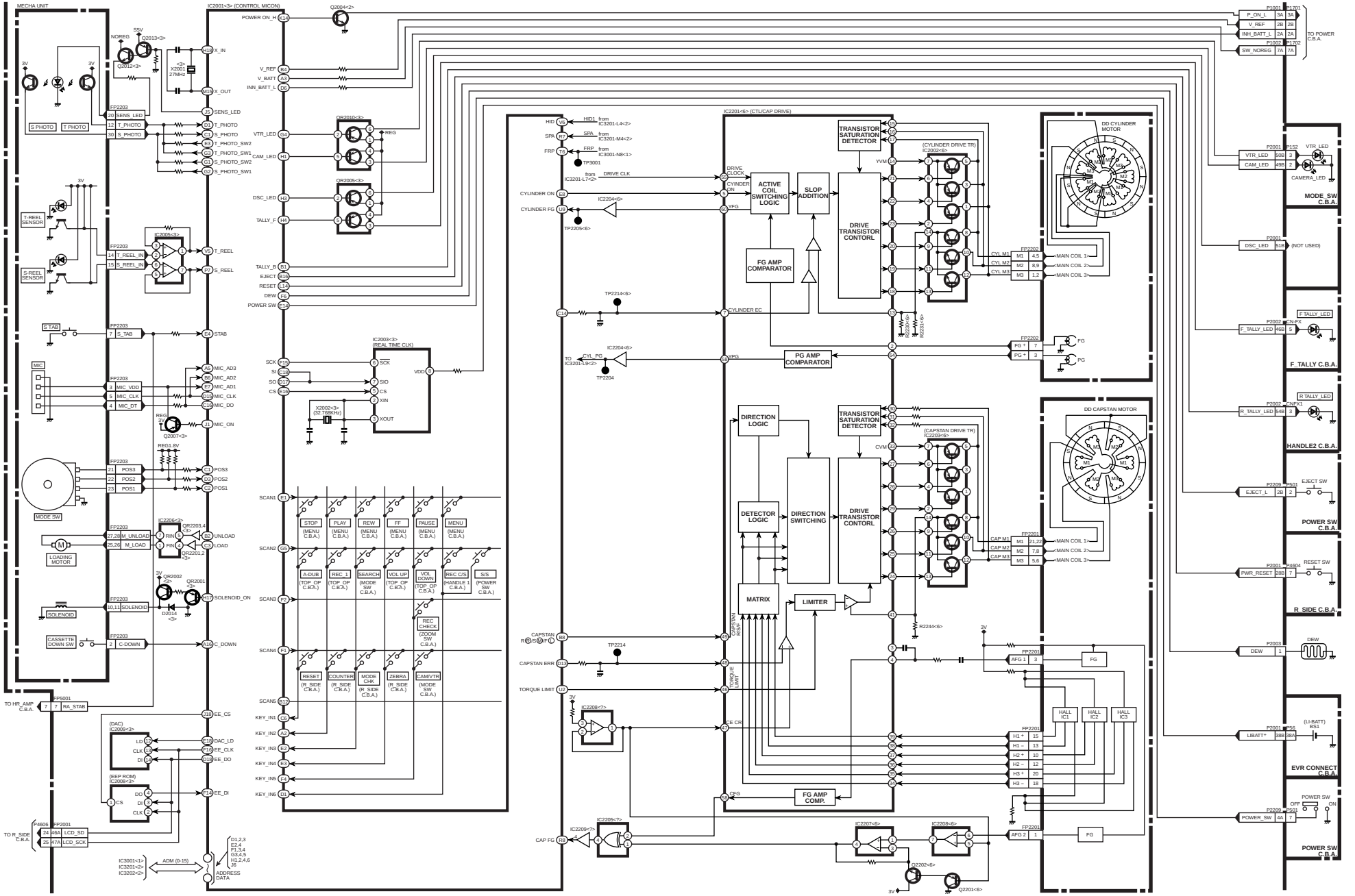
VIDEO (VIDEO 1/ VIDEO 2/ EX_INPUT) BLOCK DIAGRAM



MONITOR (EVF DRIVER / LCD) BLOCK DIAGRAM

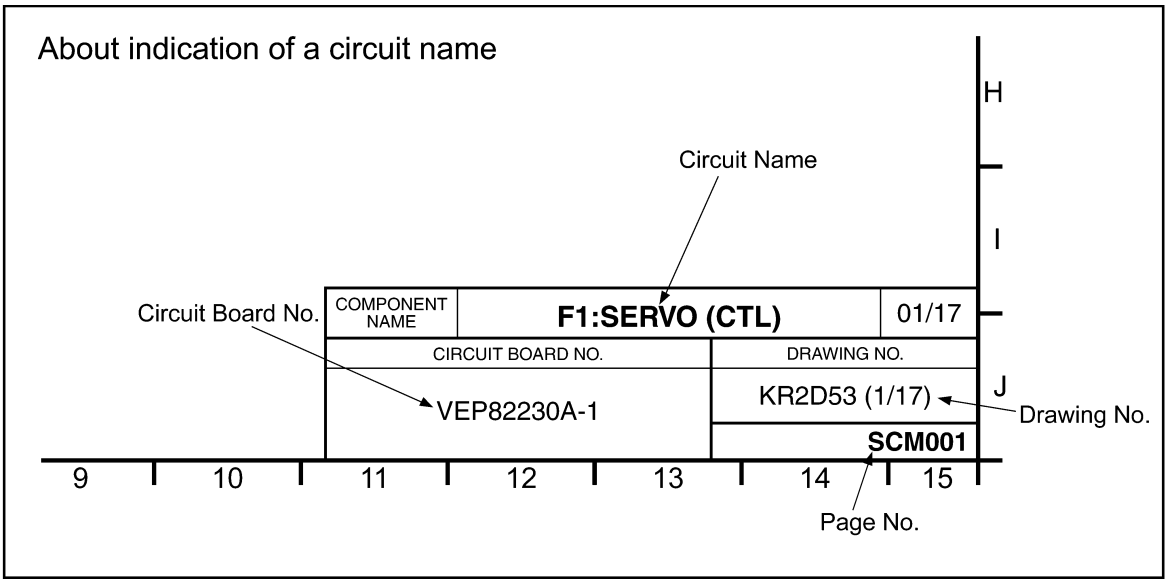


CONTROL (CONTROL/DRIVE) BLOCK DIAGRAM



SECTION 6

SCHEMATIC DIAGRAMS



NOTE:
BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST, SECTION 8

CAUTION

THE ▭ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CONTENTS

INTERCONNTION
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VTR (VIDEO 1) (1/8)..... SCM002
VTR (VIDEO 2) (2/8)..... SCM003
VTR (CONTROL) (3/8) SCM004
VTR (EVF DRIVER) (4/8)..... SCM005
VTR (EX_INPUT) (5/8) SCM006
VTR (DRIVE) (6/8)..... SCM007
VTR (DSC) (7/8) SCM008
VTR (CN) (8/8)..... SCM009

CAMERA
CAMERA (PROCESS) (1/7) SCM010
CAMERA (LENS_DRIVE) (3/7)..... SCM011
CAMERA (SUB_CN) (4/7) SCM012
CAMERA (AFE) (6/7)..... SCM013
CAMERA (TG & DRIVE) (7/7)..... SCM014

NOTE : CAMERA SCHEMATIC DIAGRAMS 2/7 and 5/7 are not used.

POWER
POWER (1/2)..... SCM015
POWER (2/2)..... SCM016

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POWER 2 (1/1)..... SCM017

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HR AMP (1/1) SCM018

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R SIDE (1/3) SCM019
R SIDE (2/3) SCM020
R SIDE (3/3) SCM021

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CAMERA OP1 (1/1)..... SCM022

CAMERA OP2
CAMERA OP2 (1/1)..... SCM023

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MENU (1/1)..... SCM024

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HANDLE 1 (2/2)..... SCM026

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HANDLE 2 (1/1)..... SCM027

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MIC (1/1) SCM028

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EVR CONNECT (1/1) SCM029

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VC_CONNECT (1/1)..... SCM030

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REAR JACK CONNECT FLEX (1/1)..... SCM031

REAR JACK
REAR JACK (1/1) SCM032

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POWER SW (1/1)..... SCM033

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TOP OP (1/1) SCM034

GYRO
GYRO (1/1) SCM035

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SIDE JACK (1/3)..... SCM037
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MIC CH1
MIC CH1 (1/1) SCM040

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MODE SW (1/1)..... SCM041

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BATTERY (1/1)..... SCM042

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HALL SENSOR (1/1).....SCM043

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VTR_SUB (1/1).....SCM044

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CAMERA SUB (1/1).....SCM044

POWER SUB
POWER SUB (1/1).....SCM044

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F_TALLY (1/1).....SCM044

EVF_A
EVF_A (1/1).....SCM045

EVF_B
EVF_B (1/1).....SCM045

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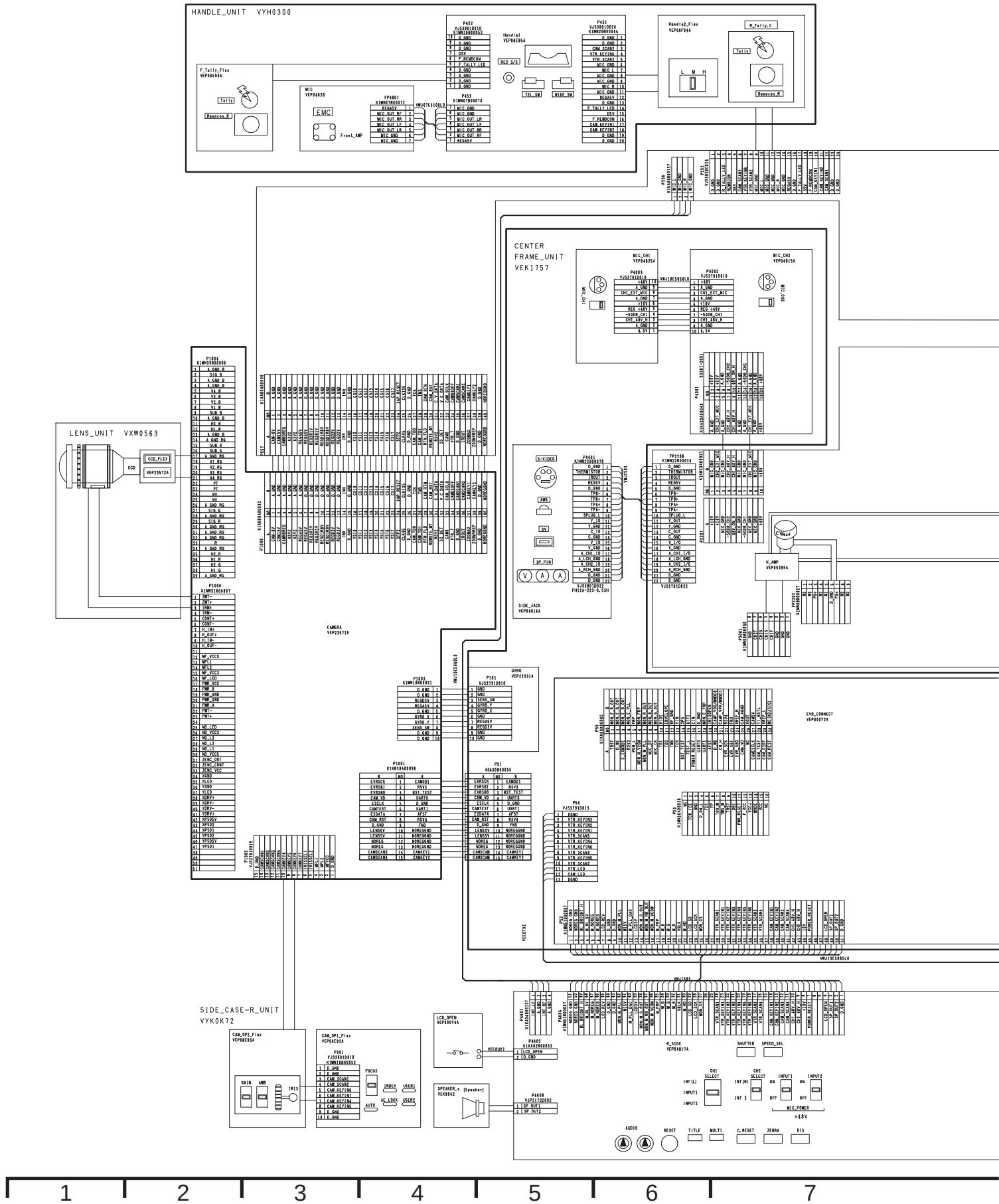
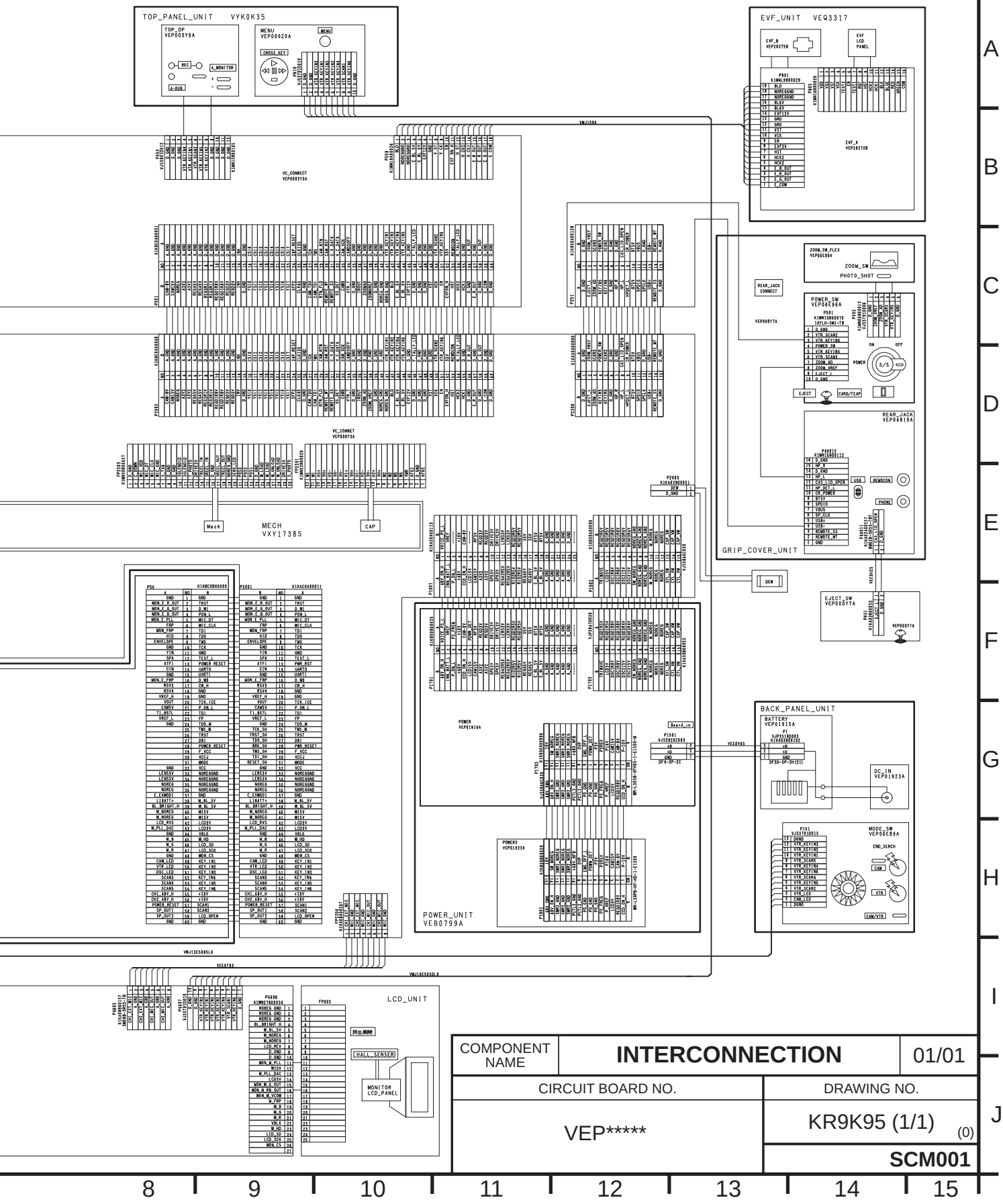
LCD OPEN SW (1/1).....SCM045

EJECT
EJECT (1/1).....SCM045

ZOOM SW
ZOOM SW (1/1).....SCM046

DC_IN
DC_IN (1/1).....SCM046

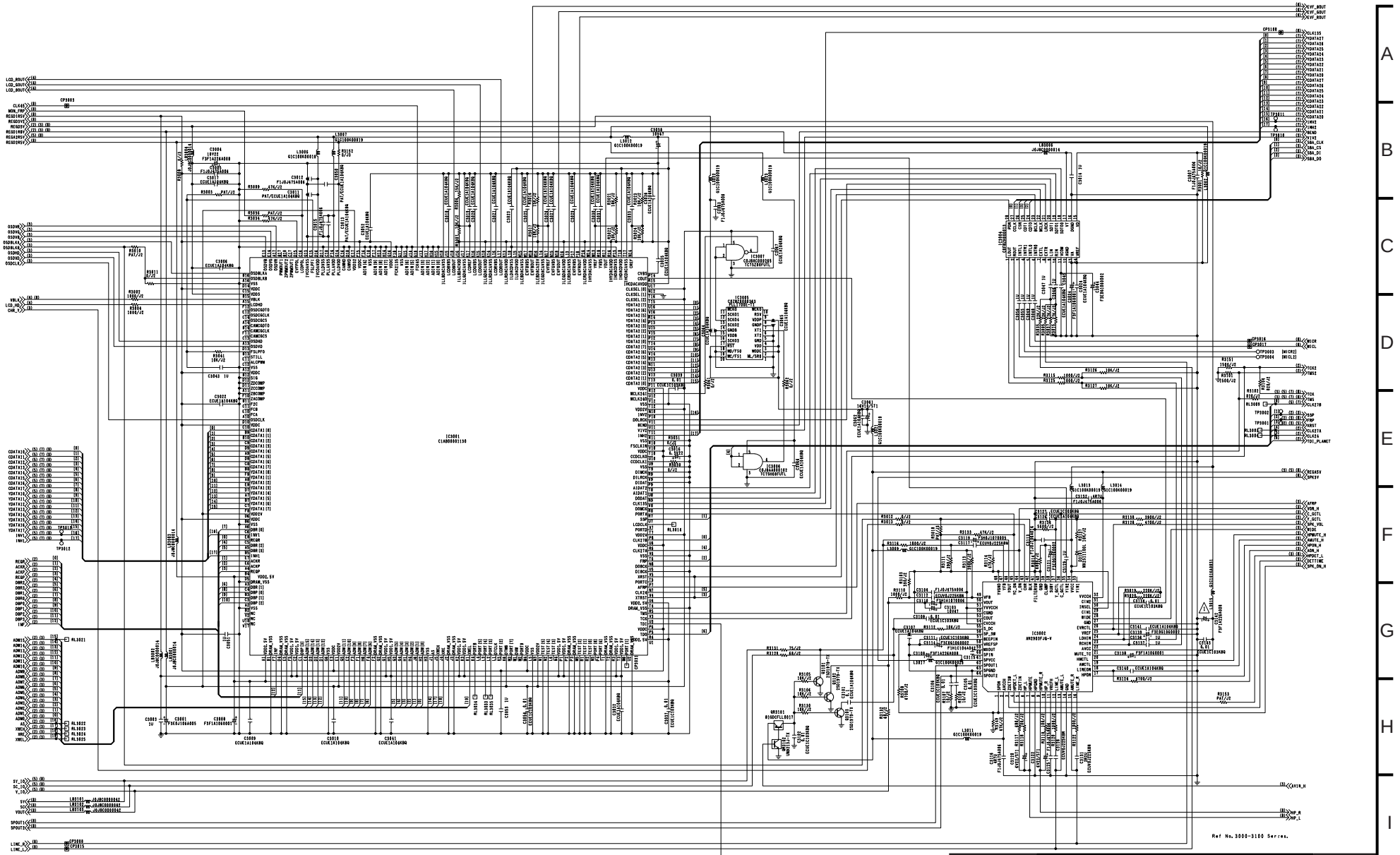

HANDLE_UNIT VYH0300
CENTER FRAME_UNIT VEK1757
LENS_UNIT VXW0563
SIDE_CASE-R_UNIT VYK0K72
CAMERA VEP25571A
GYRO VEP25331A
EVR_CONNECT VEP00Y2A
SIDE_JACK VEP04816A
H_AMP VEP05395A
LCD_OPEN VEP00Y4A
SPEAKER_A VEK0942
R_SIDE VEP08017A
1
2
3
4
5
6
7



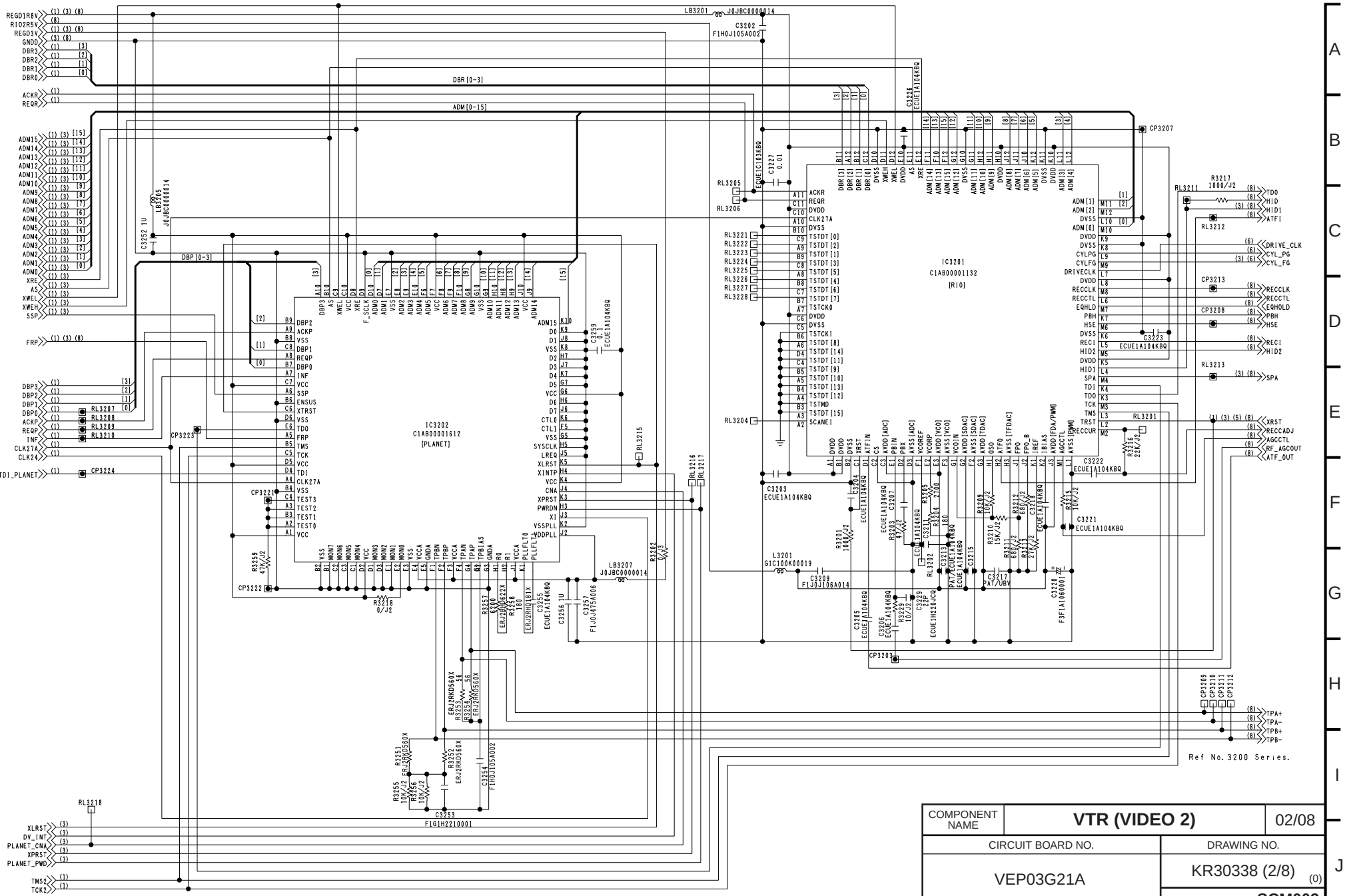
COMPONENT NAME	**INTERCONNECTION**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP*****	KR9K95 (1/1) (0)	
	SCM001	

A B C D E F G H I J

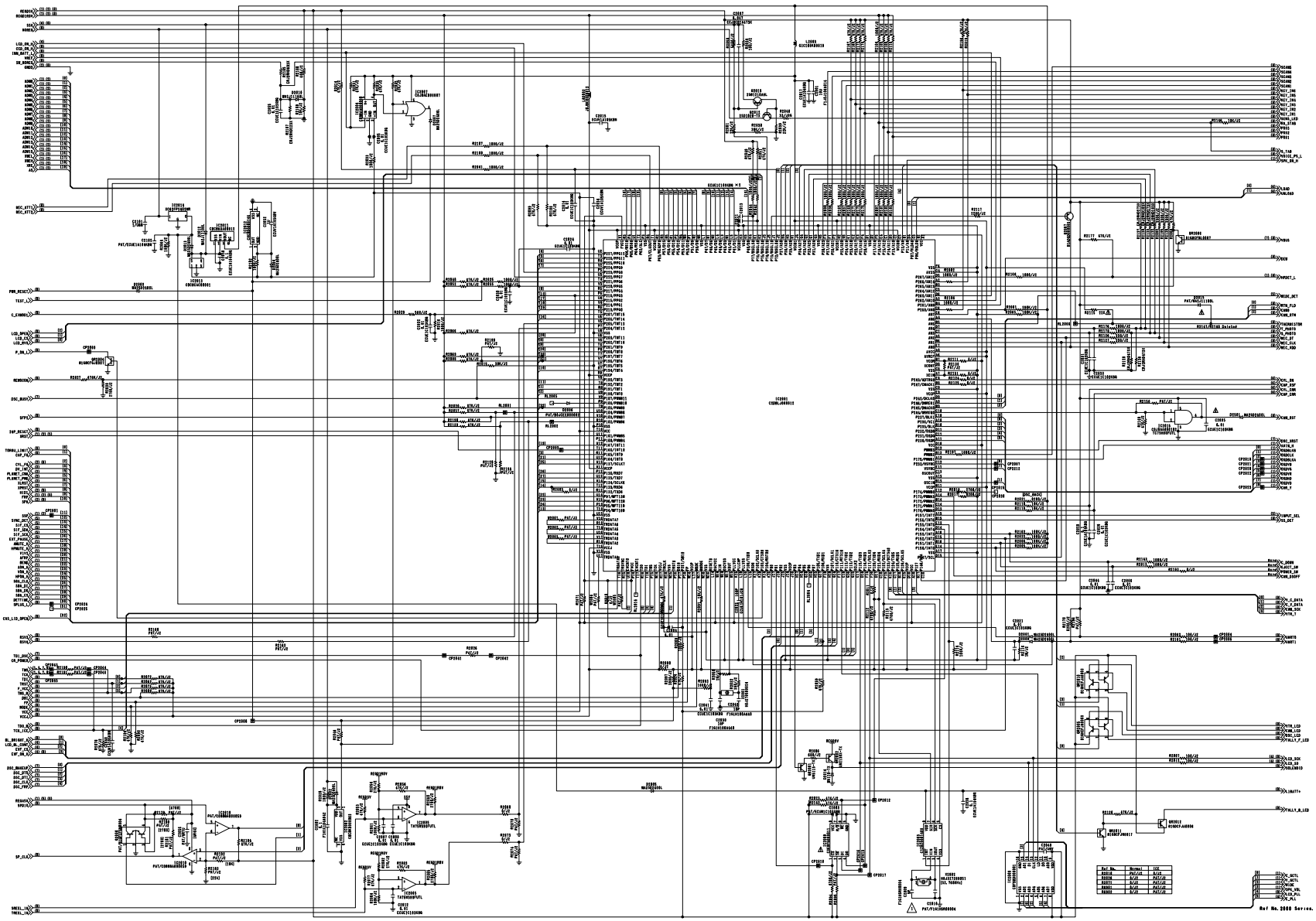
8 9 10 11 12 13 14 15



COMPONENT NAME	**VTR (VIDEO 1)**	01/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP03G21A	KR30338 (1/8)-1 (0)	
	SCM002	



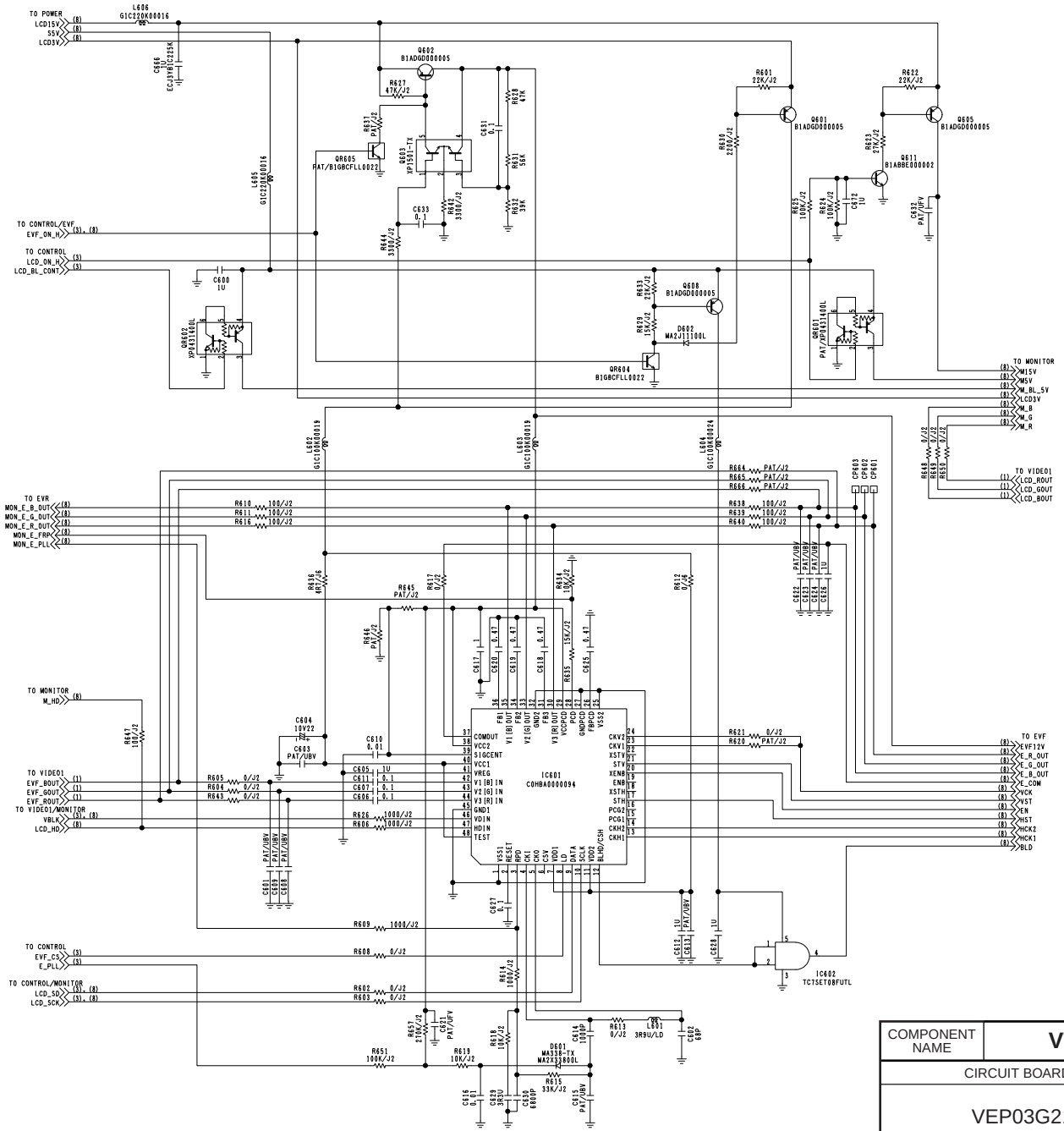
COMPONENT NAME	VTR (VIDEO 2)	02/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP03G21A	KR30338 (2/8) (0)	
	SCM003	



COMPONENT NAME	VTR (CONTROL)	03/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (3/8) (0)
		SCM004

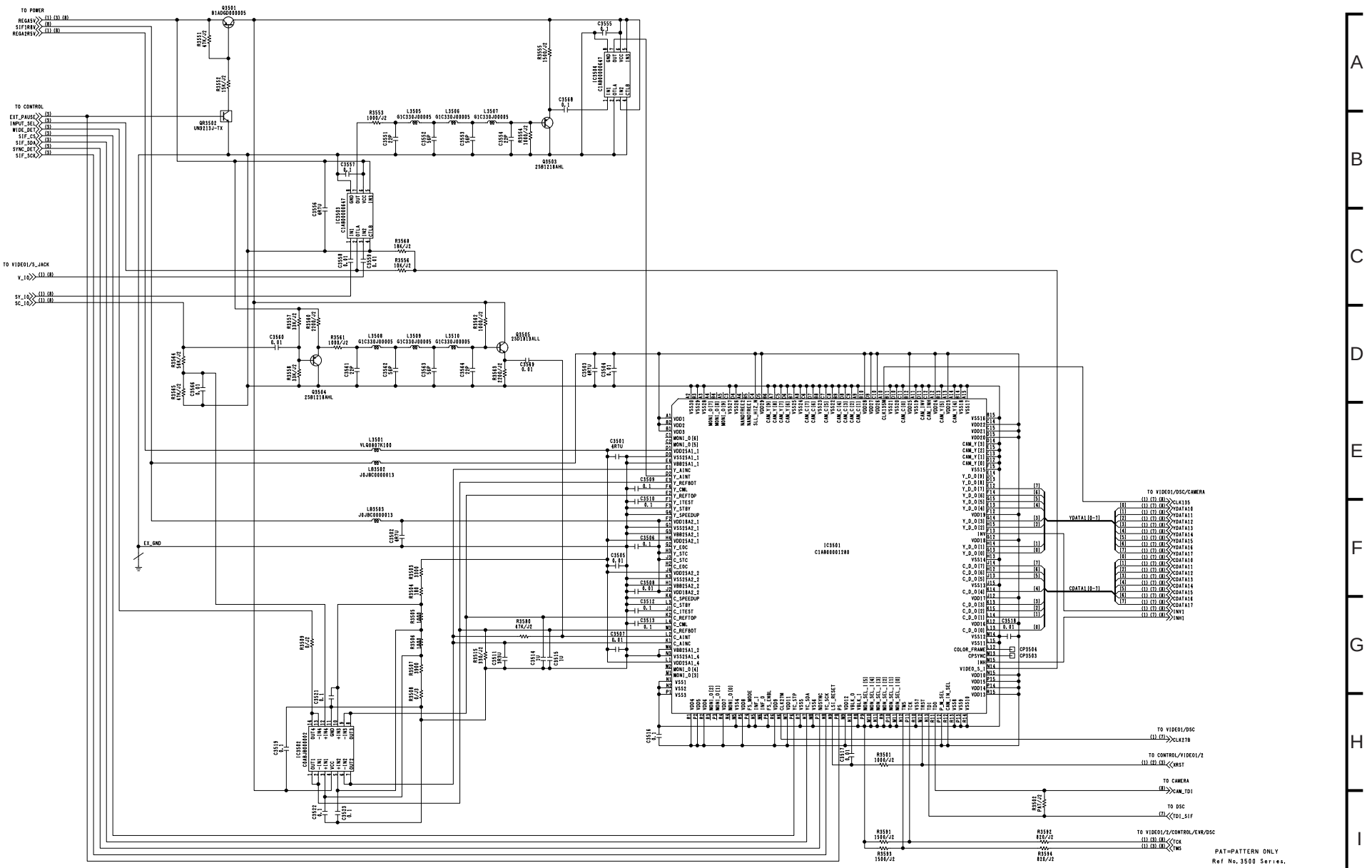
A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

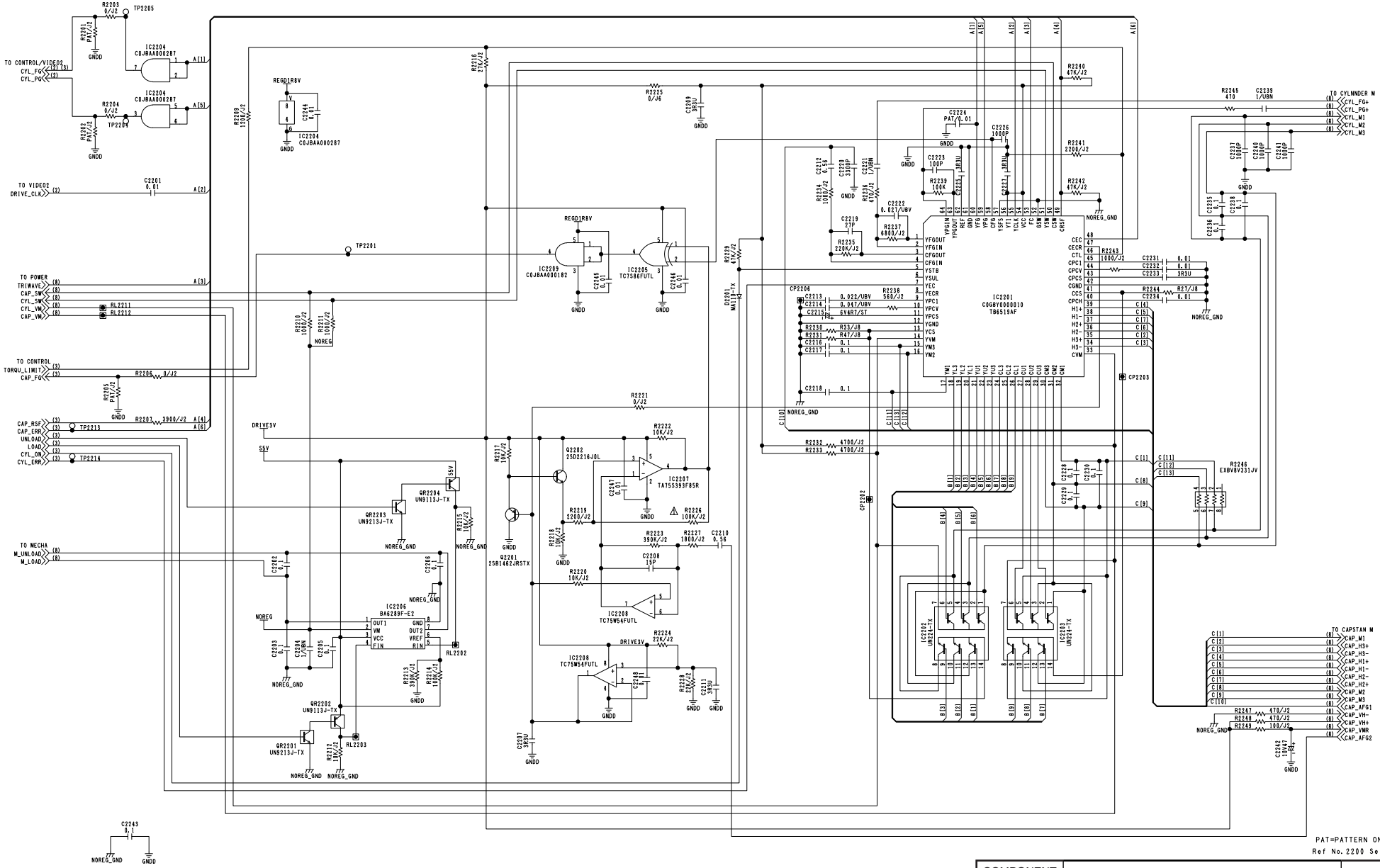


Ref No.	NTSC	PAL
R651	100K/J2	120K/J2

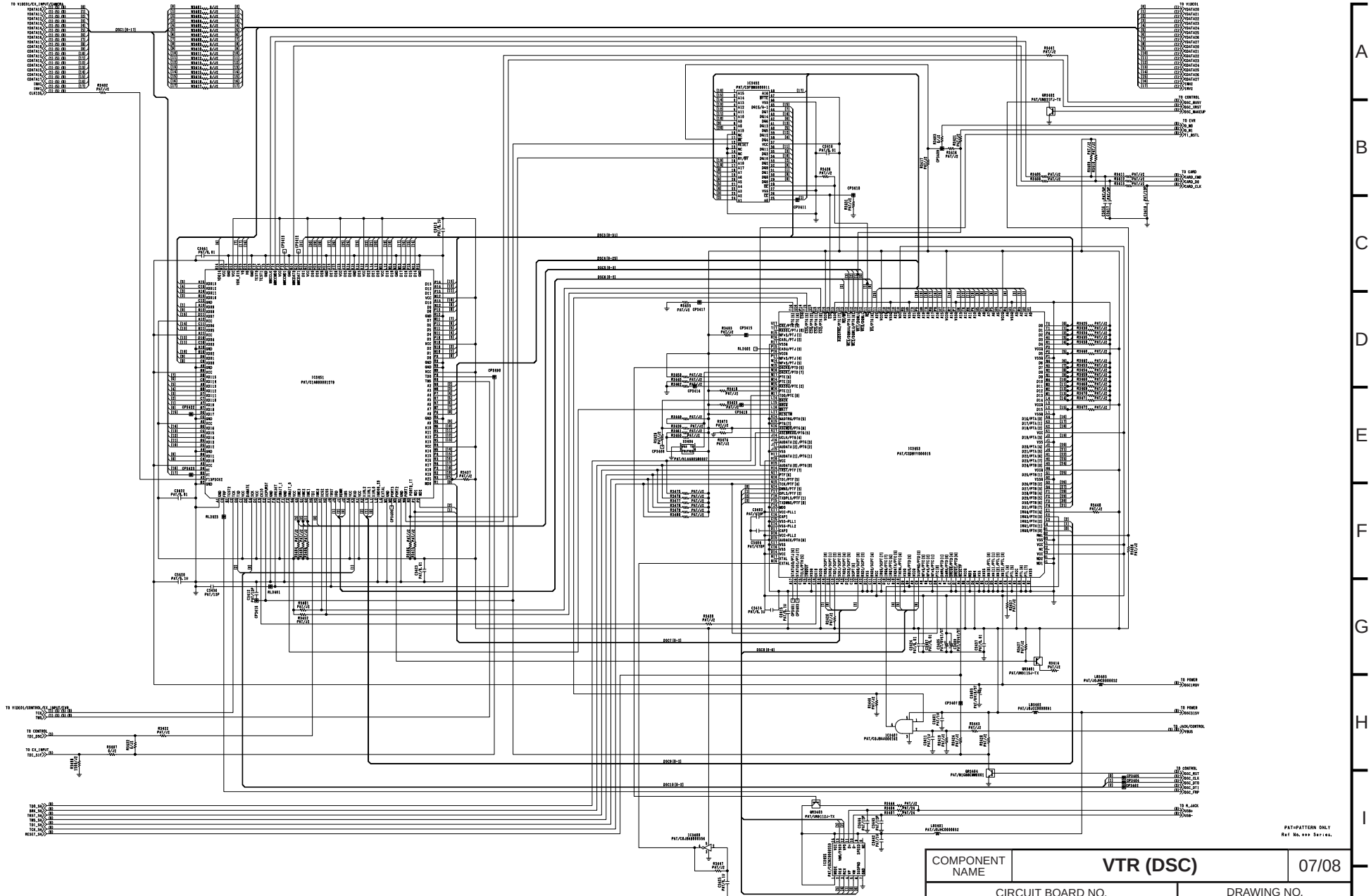
COMPONENT NAME	VTR (EVF DRIVER)	04/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (4/8) (0)
		SCM005



COMPONENT NAME	VTR (EX_INPUT)	05/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (5/8) (0)
		SCM006



COMPONENT NAME	VTR (DRIVE)	06/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (6/8) (0)
		SCM007

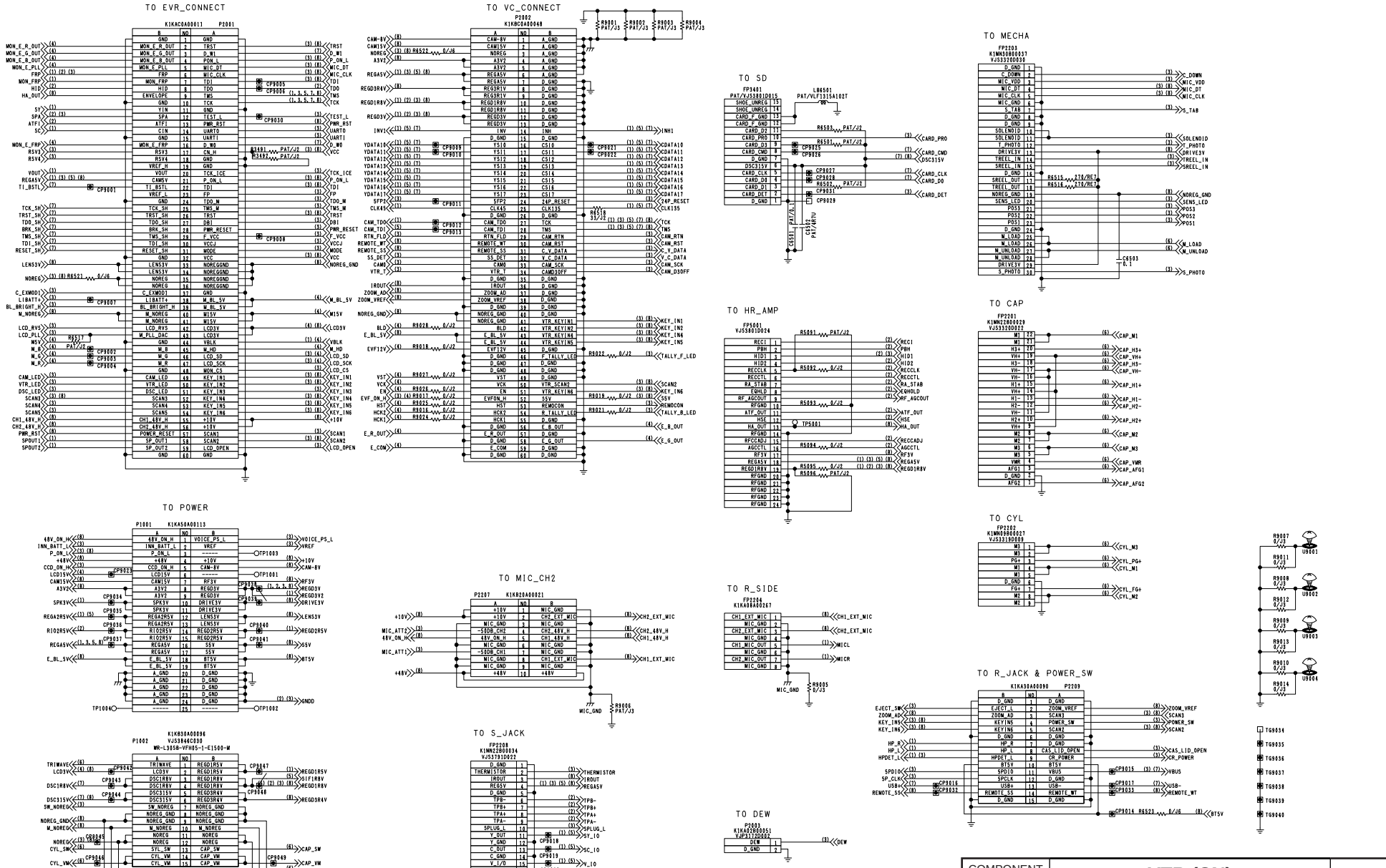


PAT=PATTERN ONLY
Ref No.+++ Series.

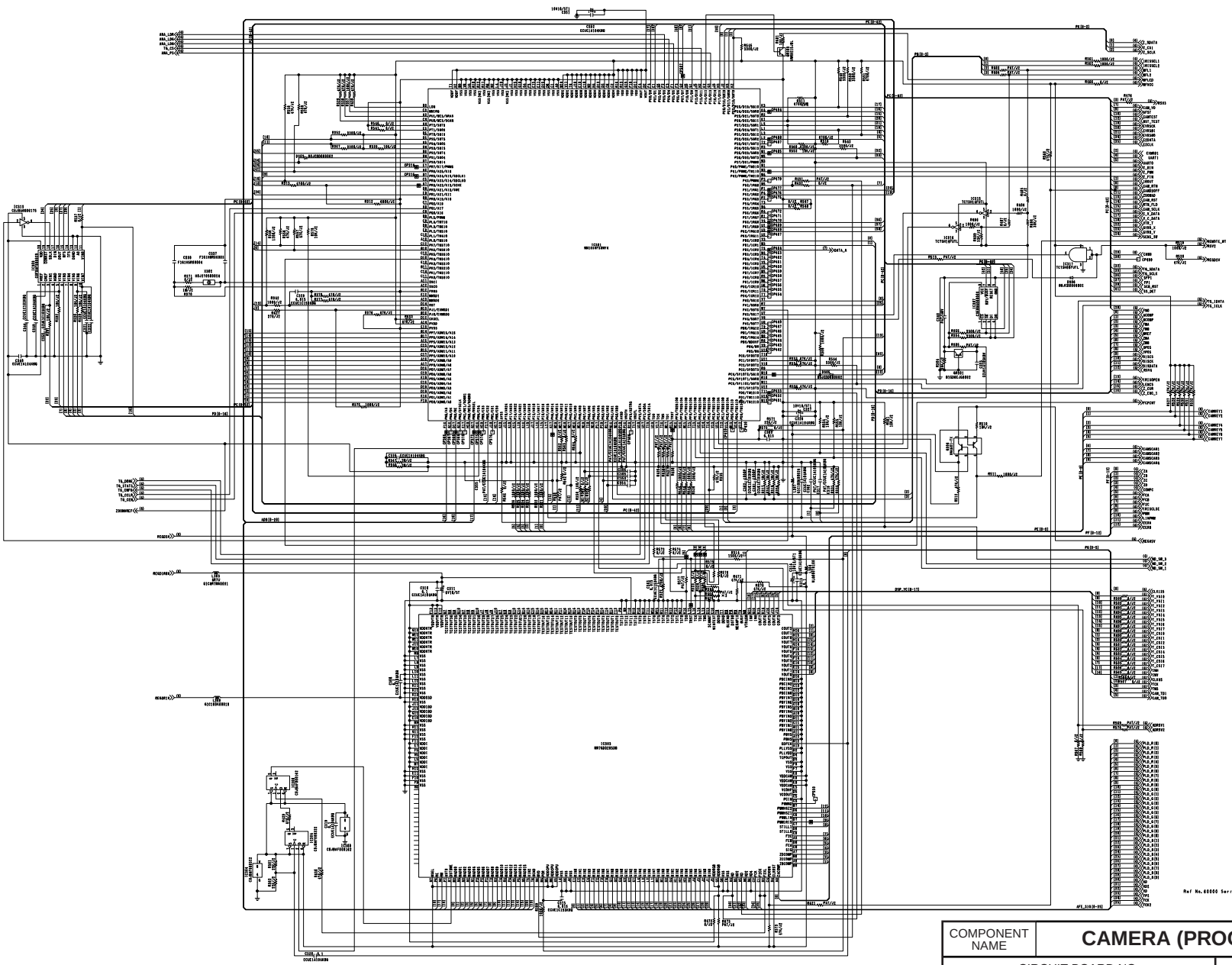
COMPONENT NAME	VTR (DSC)	07/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (7/8) (0)
		SCM008

A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



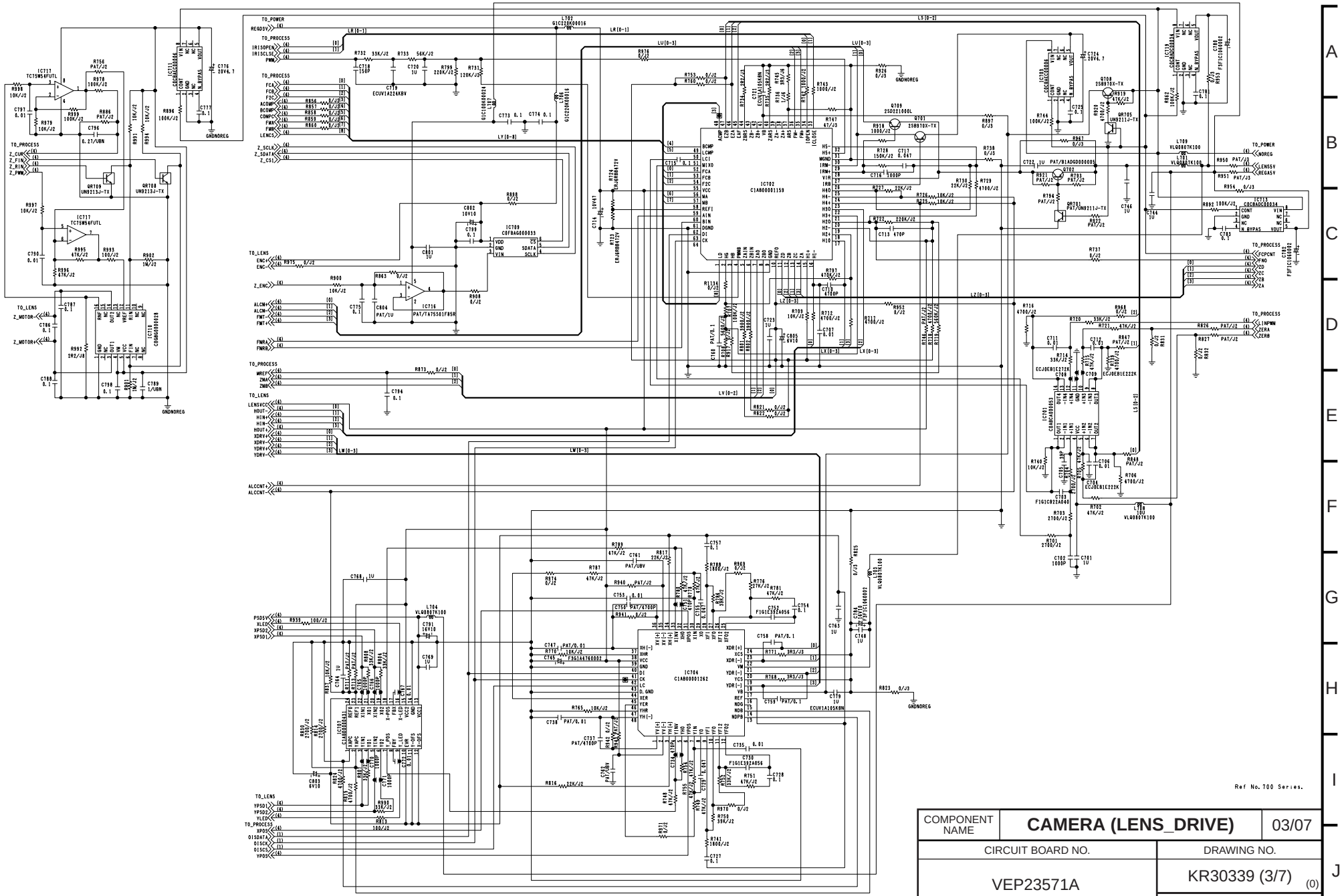
COMPONENT NAME	**VTR (CN)**	08/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G21A		KR30338 (8/8) (0)
		SCM009



COMPONENT NAME	CAMERA (PROCESS)	01/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP23571A		KR30339 (1/7) (0)
		SCM010

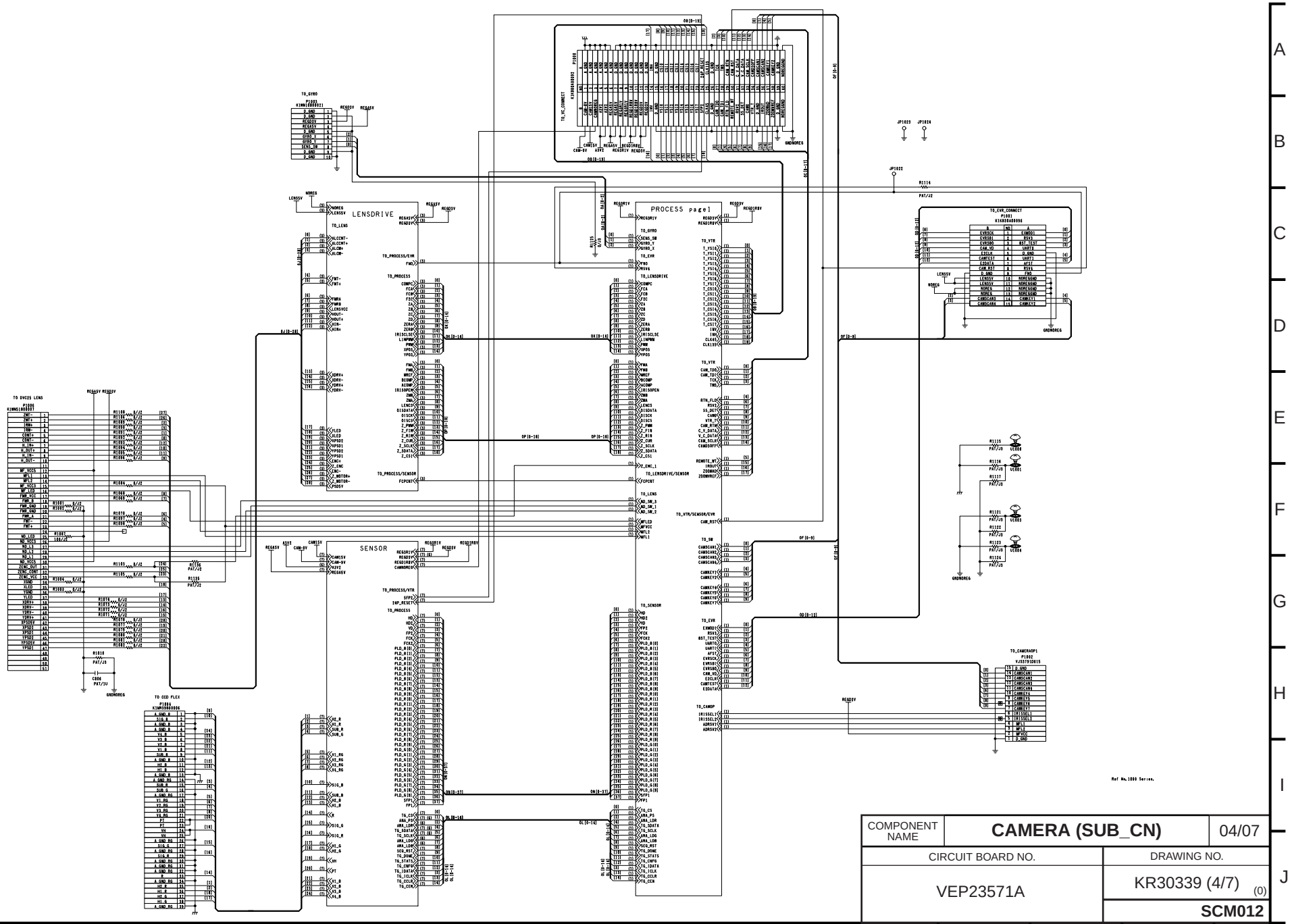
A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

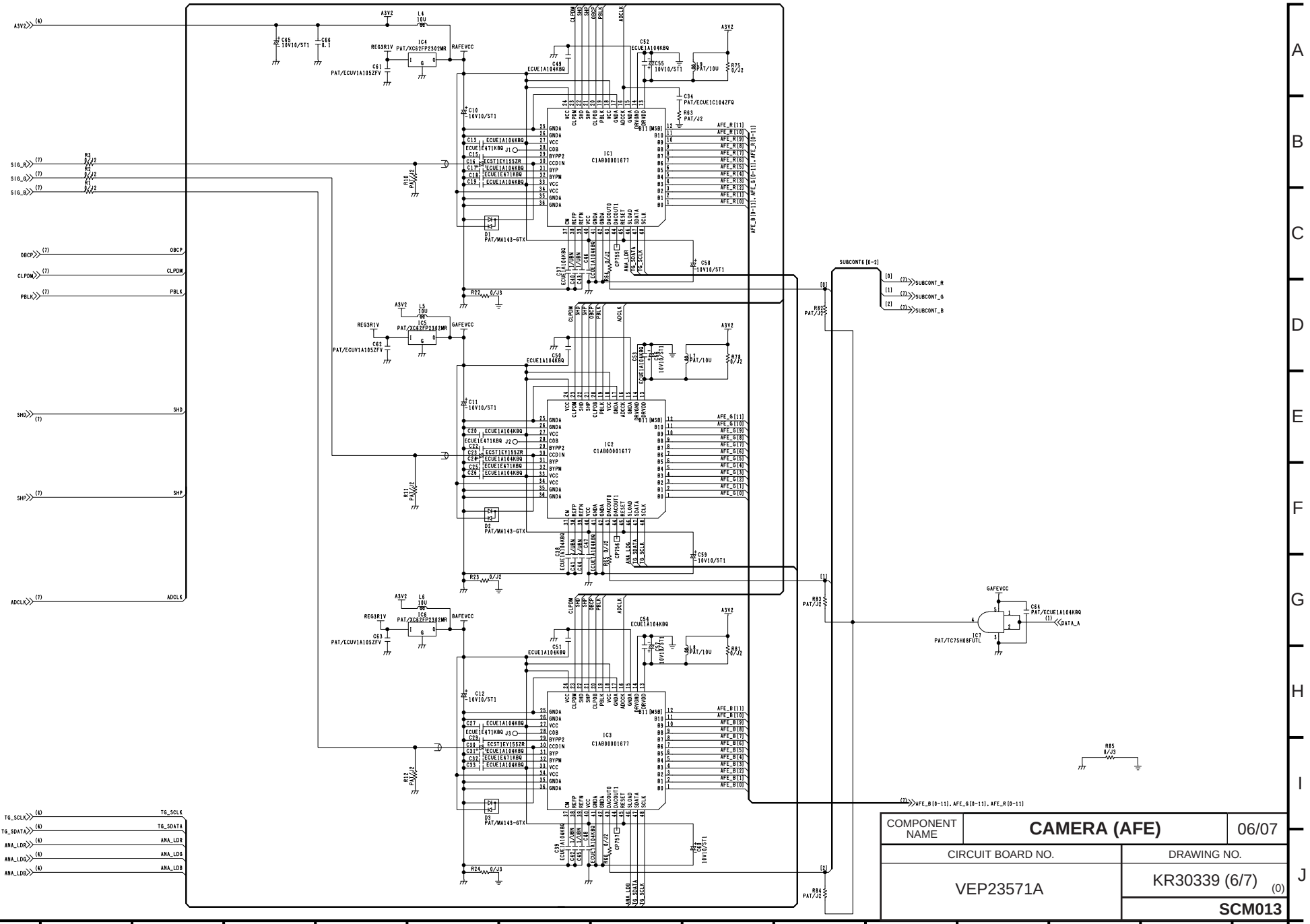


Ref No. 700 Series.

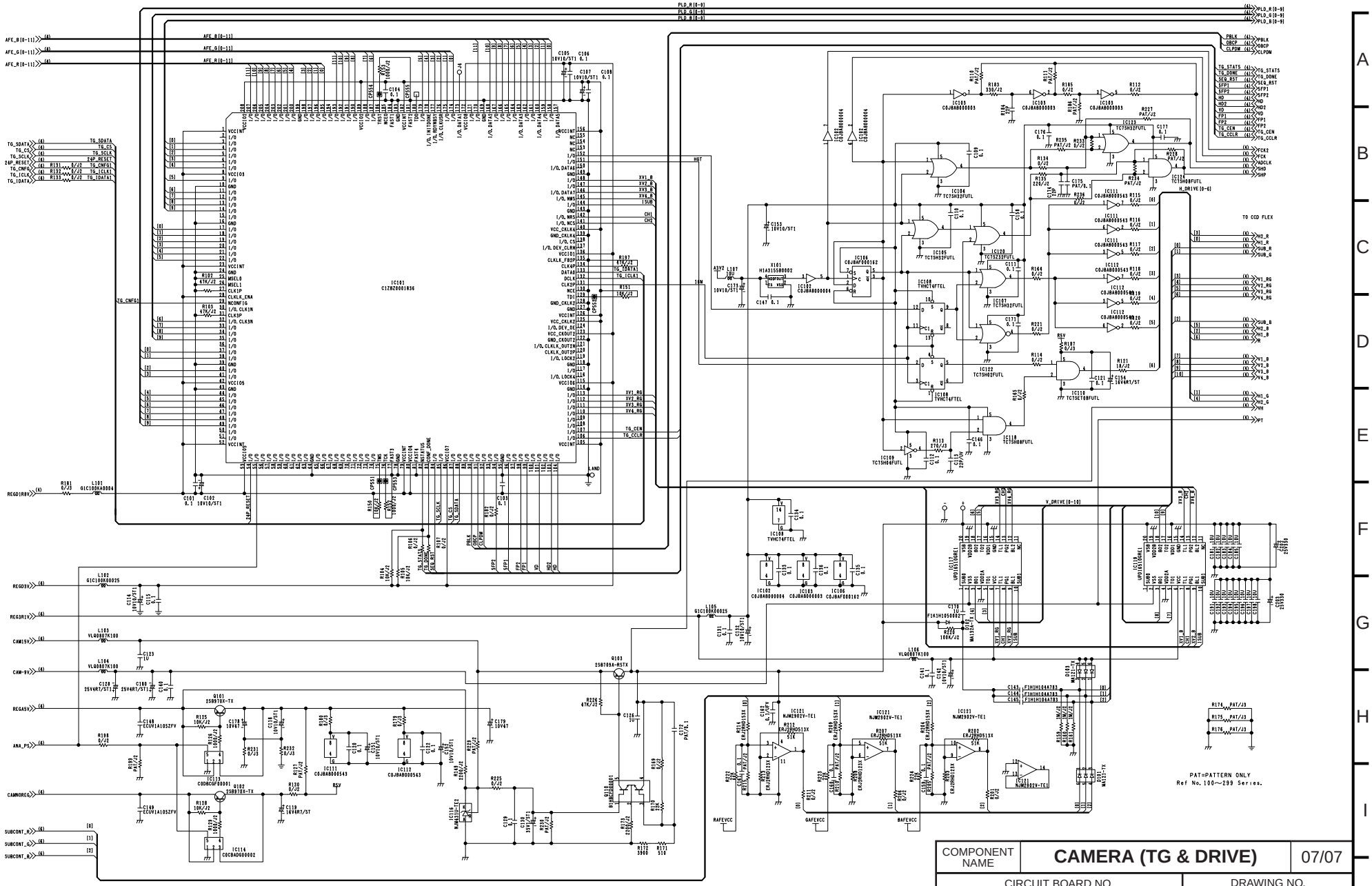
COMPONENT NAME	**CAMERA (LENS_DRIVE)**	03/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP23571A		KR30339 (3/7) (0)
		SCM011



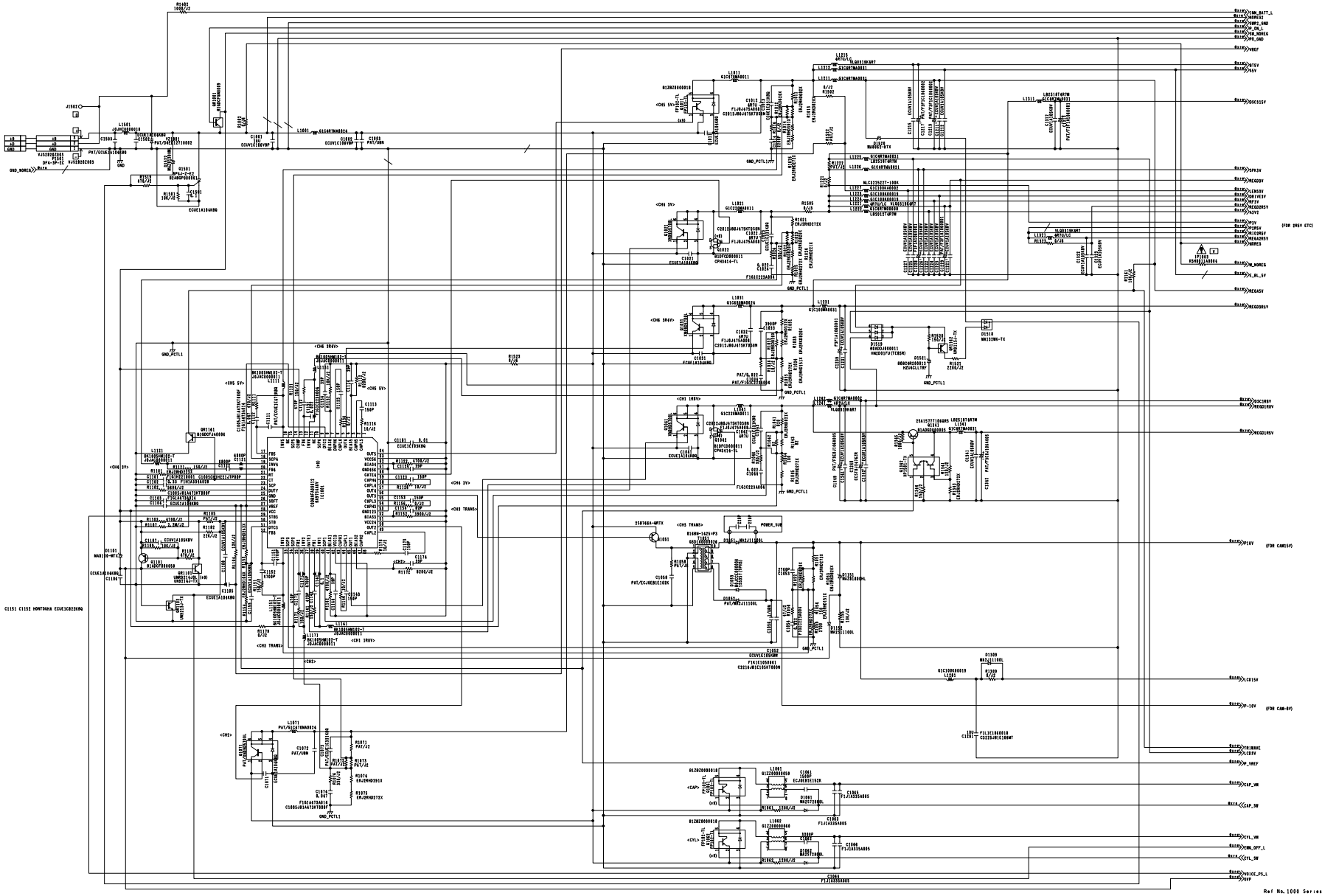
COMPONENT NAME	**CAMERA (SUB_CN)**	04/07
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23571A	KR30339 (4/7) (0)	
	SCM012	



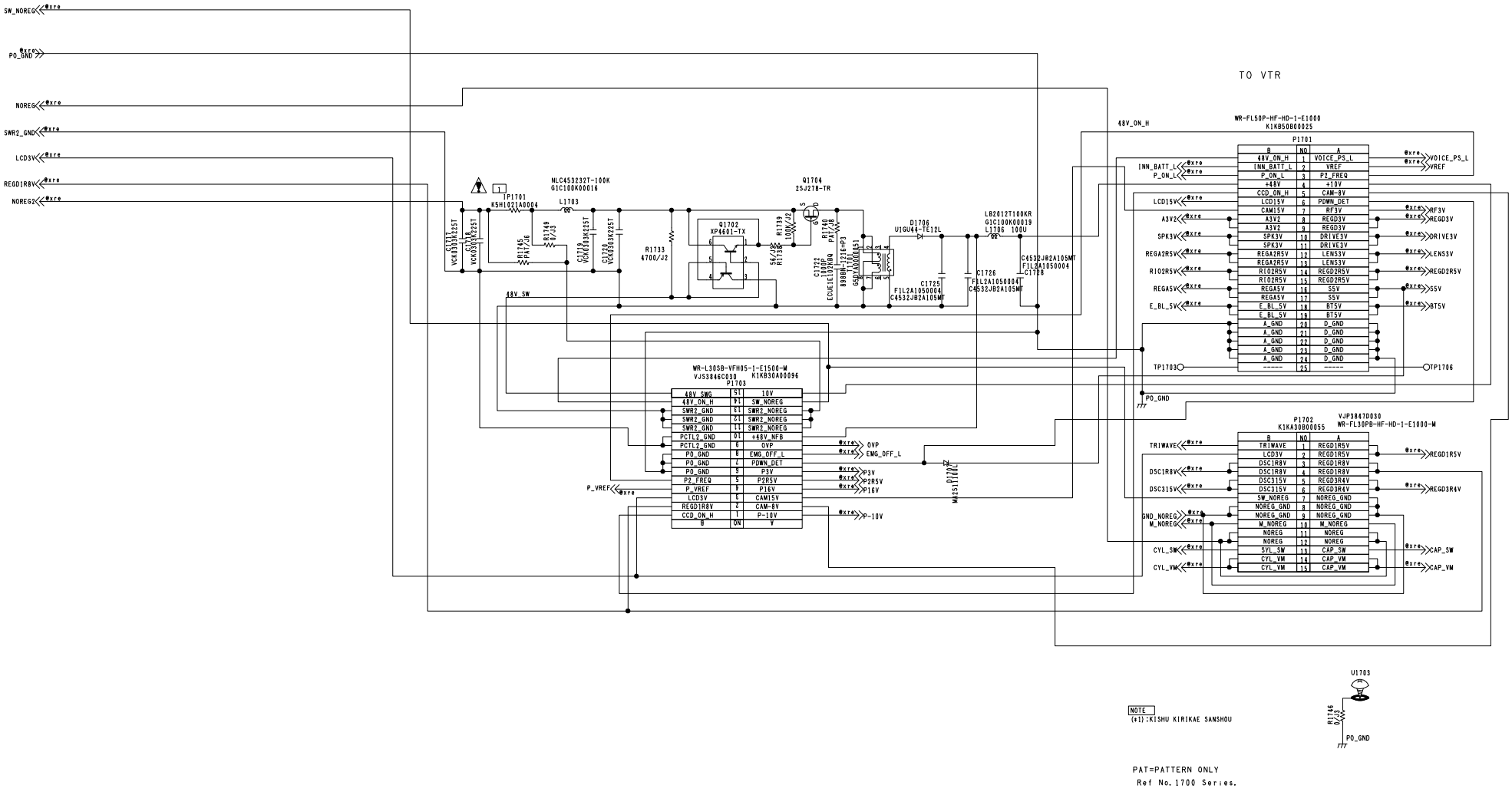
COMPONENT NAME	**CAMERA (AFE)**	06/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP23571A		KR30339 (6/7) (0)
		SCM013



COMPONENT NAME	CAMERA (TG & DRIVE)	07/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP23571A		KR30339 (7/7) (0)
		SCM014



COMPONENT NAME	POWER	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP01914A		KR1F82 (1/2) (0)
		SCM015

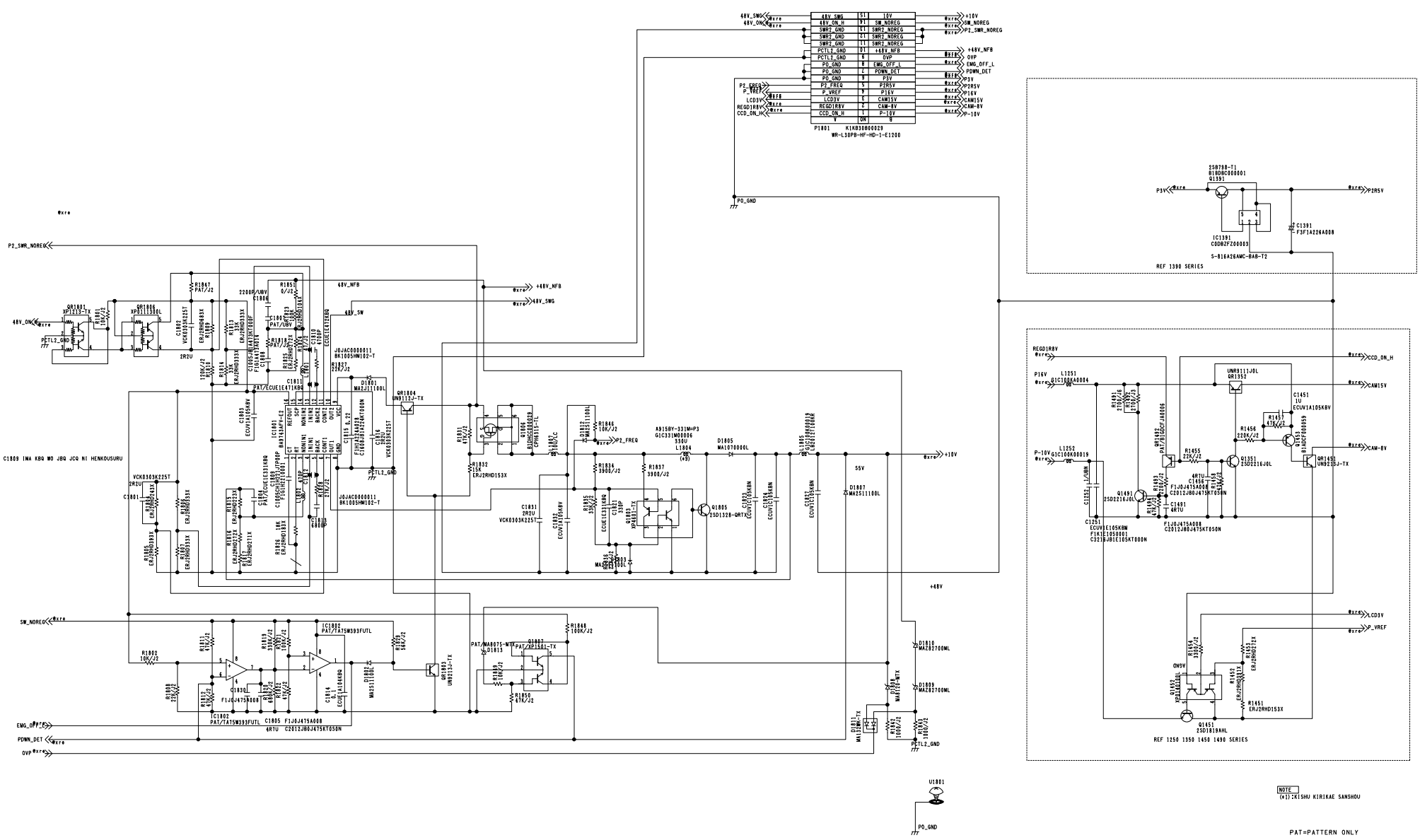


⚠ 警 告

⚠ 印の部品は安全上重要な部品です。
交換するときは、安全上および性能維持のため
必ず指定の部品をご使用ください。

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

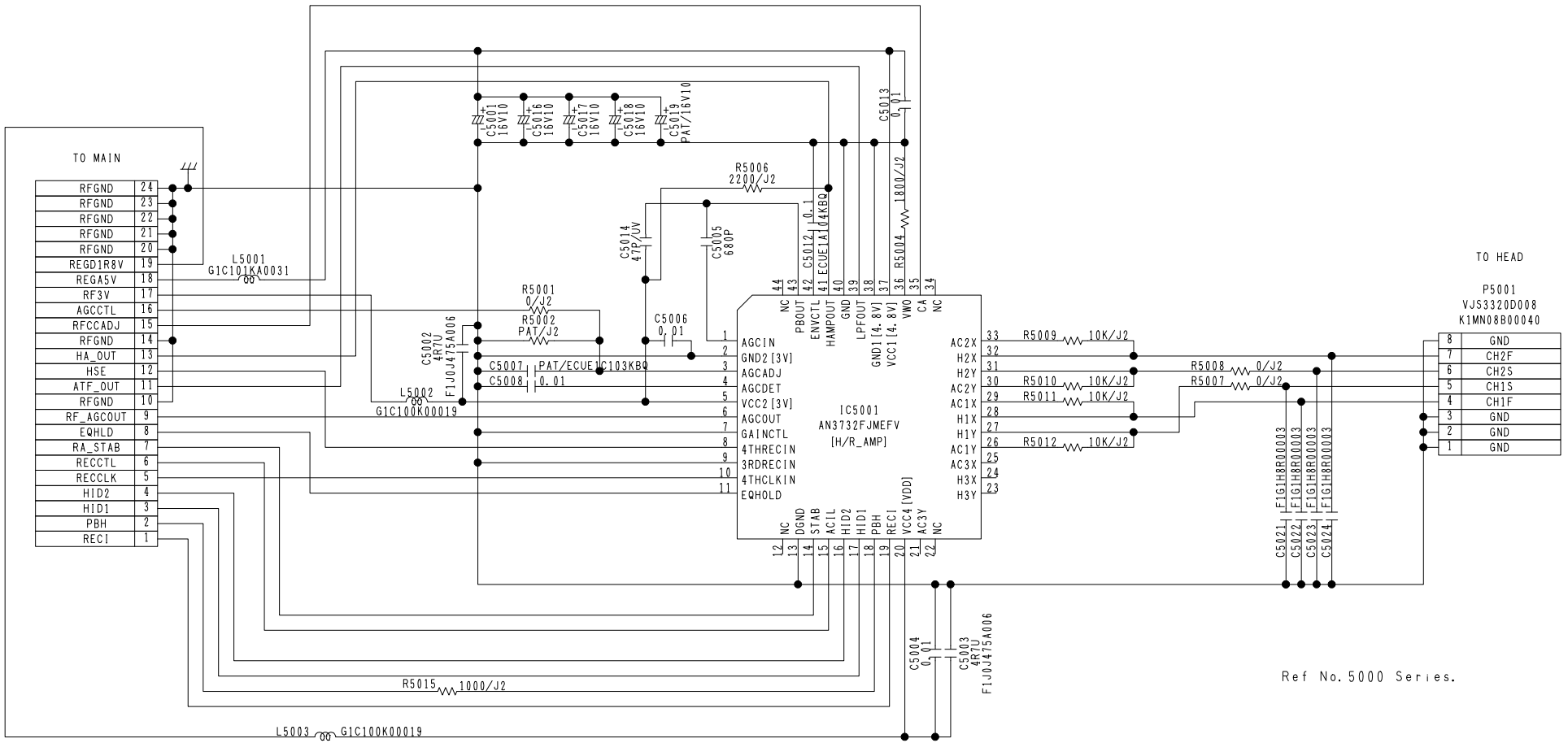
COMPONENT NAME	POWER	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP01914A		KR1F82 (2/2) (0)
		SCM016



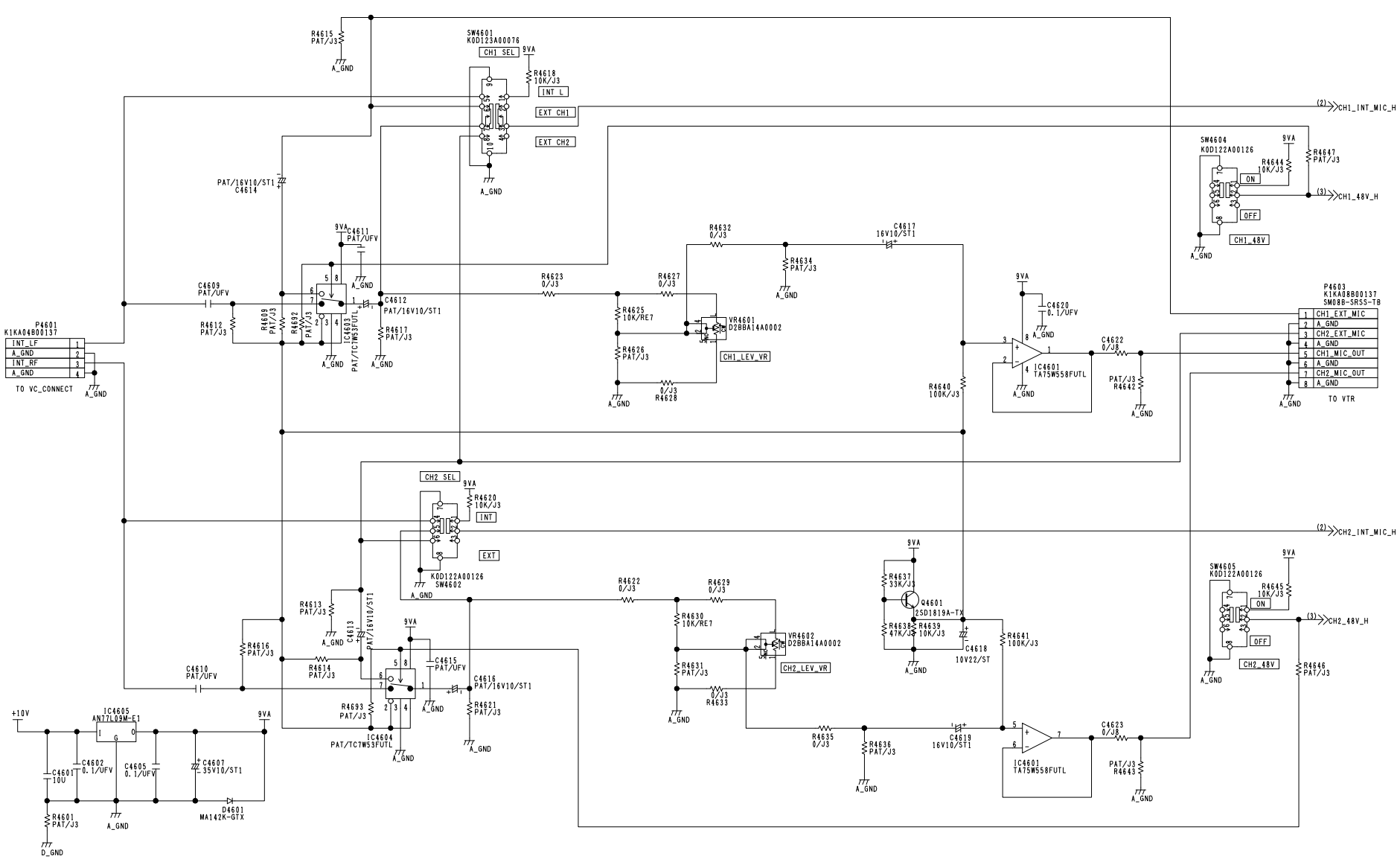
COMPONENT NAME	**POWER 2**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP01922A	KR1F94 (1/1) (0)	
	SCM017	

A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

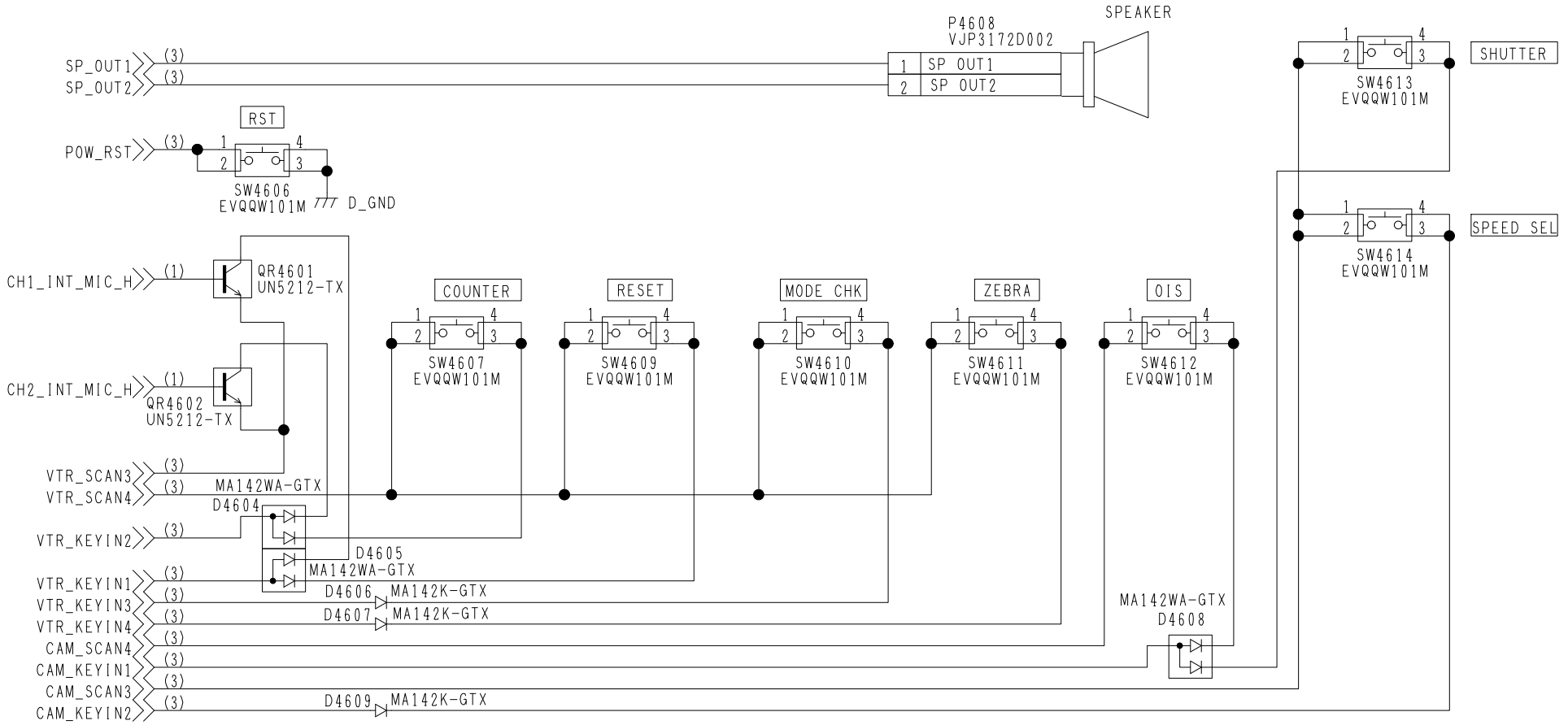


COMPONENT NAME	HR_AMP	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP05395A	KR5610 (1/1) (0)	
	SCM018	



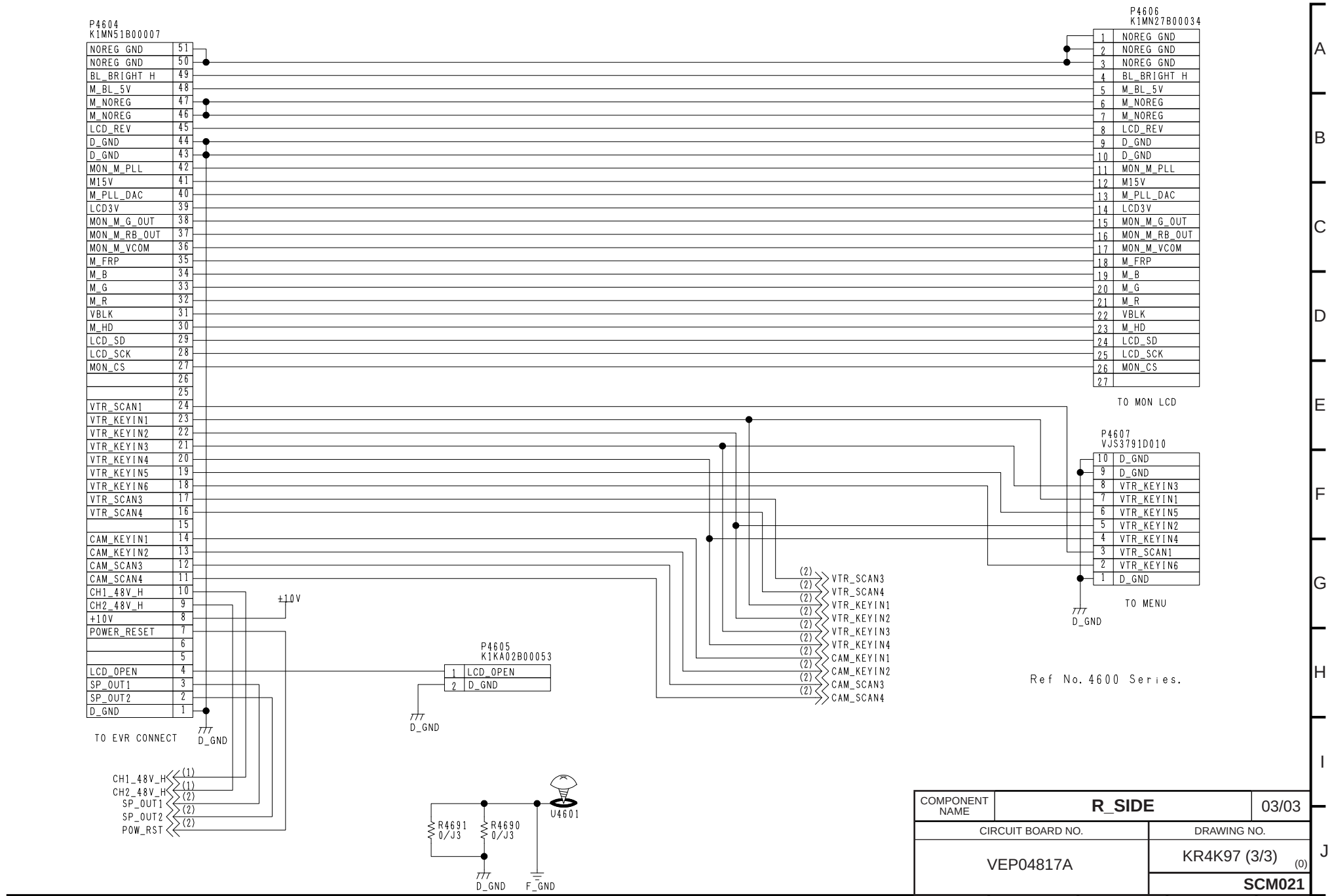
Ref No. 4600 Series.

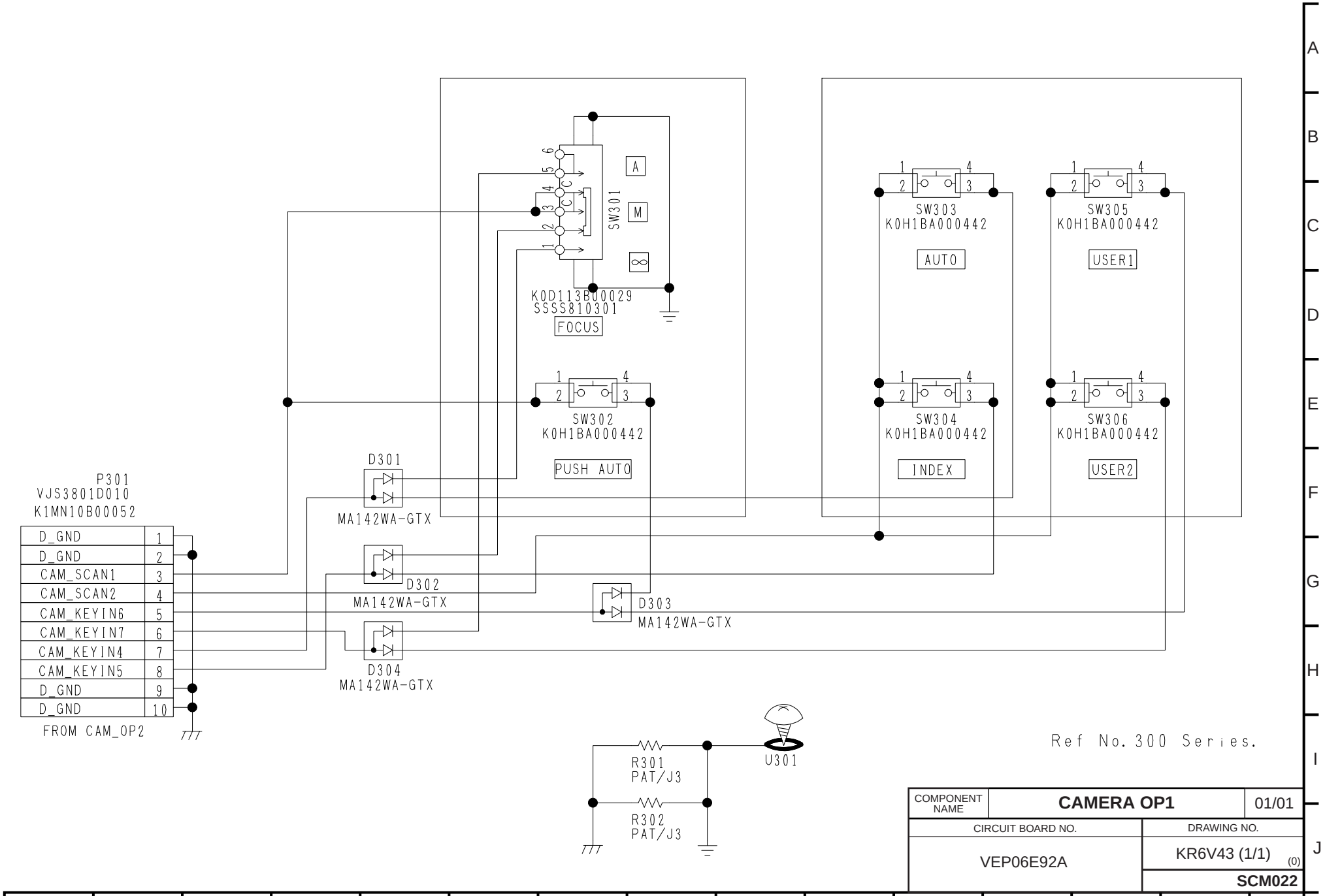
COMPONENT NAME	R_SIDE	01/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04817A		KR4K97 (1/3) (0)
		SCM019

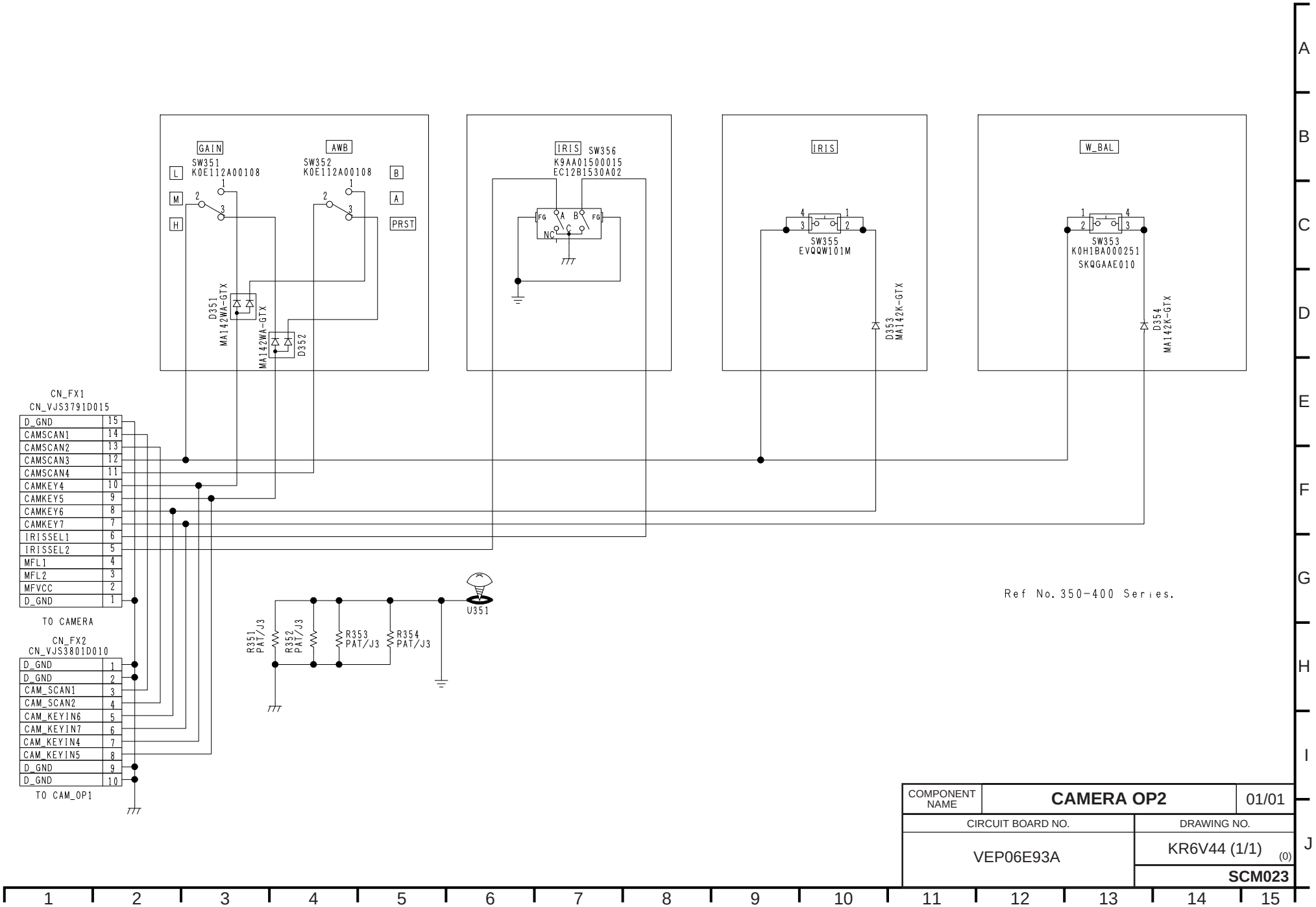


Ref No. 4600 Series.

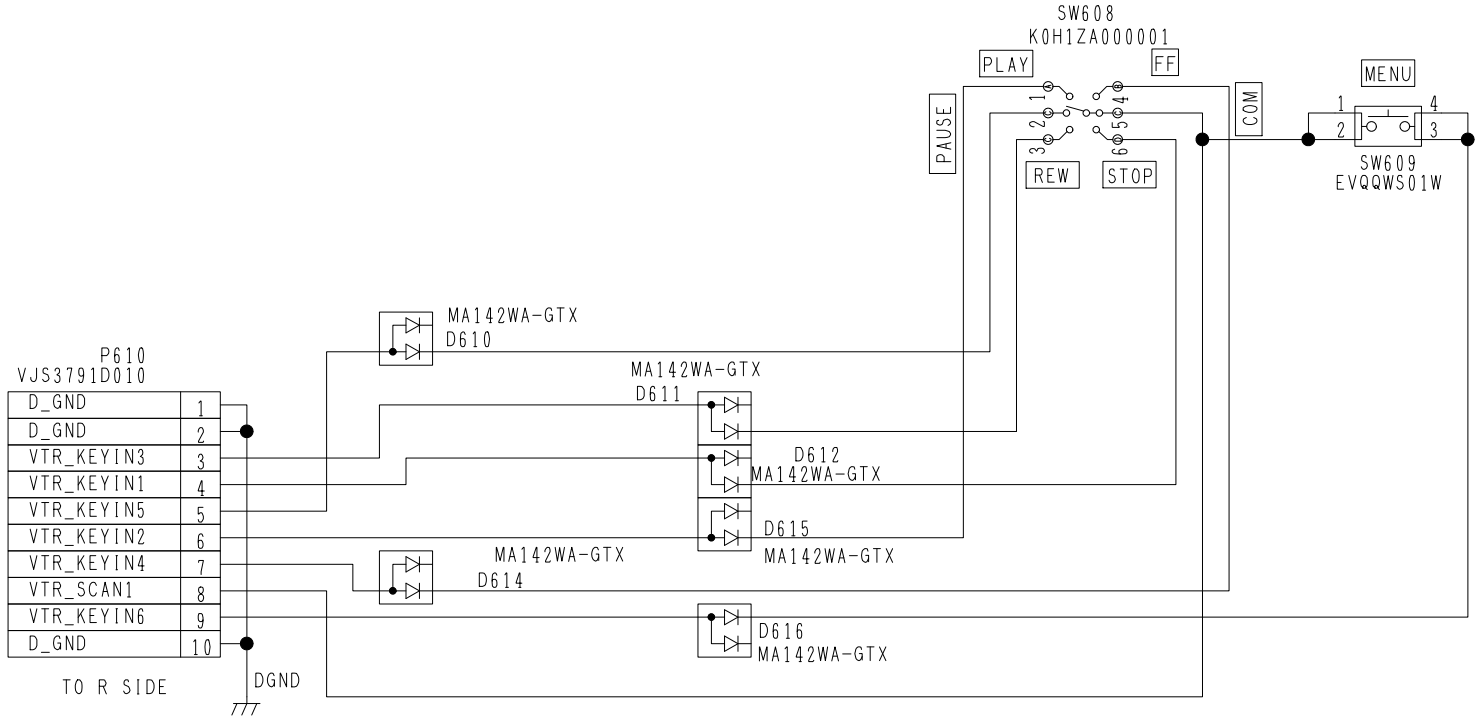
COMPONENT NAME	R_SIDE	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04817A		KR4K97 (2/3) (0)
		SCM020

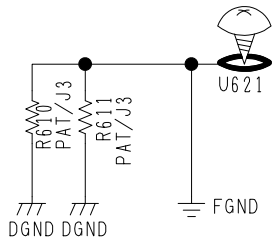

P4604
K1MN51B00007
NOREG GND 51
NOREG GND 50
BL_BRIGHT H 49
M_BL_5V 48
M_NOREG 47
M_NOREG 46
LCD_REV 45
D_GND 44
D_GND 43
MON_M_PLL 42
M15V 41
M_PLL_DAC 40
LCD3V 39
MON_M_G_OUT 38
MON_M_RB_OUT 37
MON_M_VCOM 36
M_FRP 35
M_B 34
M_G 33
M_R 32
VBLK 31
M_HD 30
LCD_SD 29
LCD_SCK 28
MON_CS 27
26
25
VTR_SCAN1 24
VTR_KEYIN1 23
VTR_KEYIN2 22
VTR_KEYIN3 21
VTR_KEYIN4 20
VTR_KEYIN5 19
VTR_KEYIN6 18
VTR_SCAN3 17
VTR_SCAN4 16
15
CAM_KEYIN1 14
CAM_KEYIN2 13
CAM_SCAN3 12
CAM_SCAN4 11
CH1_48V_H 10
CH2_48V_H 9
+10V 8
POWER_RESET 7
6
5
LCD_OPEN 4
SP_OUT1 3
SP_OUT2 2
D_GND 1
TO EVR CONNECT
D_GND
+10V
CH1_48V_H (1)
CH2_48V_H (1)
SP_OUT1 (2)
SP_OUT2 (2)
POW_RST (2)
P4605
K1KA02B00053
1 LCD_OPEN
2 D_GND
D_GND
(2) VTR_SCAN3
(2) VTR_SCAN4
(2) VTR_KEYIN1
(2) VTR_KEYIN2
(2) VTR_KEYIN3
(2) VTR_KEYIN4
(2) CAM_KEYIN1
(2) CAM_KEYIN2
(2) CAM_SCAN3
(2) CAM_SCAN4
R4691 0/J3
R4690 0/J3
U4601
D_GND
F_GND
P4606
K1MN27B00034
1 NOREG GND
2 NOREG GND
3 NOREG GND
4 BL_BRIGHT H
5 M_BL_5V
6 M_NOREG
7 M_NOREG
8 LCD_REV
9 D_GND
10 D_GND
11 MON_M_PLL
12 M15V
13 M_PLL_DAC
14 LCD3V
15 MON_M_G_OUT
16 MON_M_RB_OUT
17 MON_M_VCOM
18 M_FRP
19 M_B
20 M_G
21 M_R
22 VBLK
23 M_HD
24 LCD_SD
25 LCD_SCK
26 MON_CS
27
TO MON LCD
P4607
VJS3791D010
10 D_GND
9 D_GND
8 VTR_KEYIN3
7 VTR_KEYIN1
6 VTR_KEYIN5
5 VTR_KEYIN2
4 VTR_KEYIN4
3 VTR_SCAN1
2 VTR_KEYIN6
1 D_GND
TO MENU
D_GND
Ref No. 4600 Series.
COMPONENT NAME
R_SIDE
03/03
CIRCUIT BOARD NO.
VEP04817A
DRAWING NO.
KR4K97 (3/3) (0)
SCM021
A
B
C
D
E
F
G
H
I
J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15


P301
VJS3801D010
K1MN10B00052
D_GND 1
D_GND 2
CAM_SCAN1 3
CAM_SCAN2 4
CAM_KEYIN6 5
CAM_KEYIN7 6
CAM_KEYIN4 7
CAM_KEYIN5 8
D_GND 9
D_GND 10
FROM CAM_OP2
SW301
A
M
K0D113B00029
SSSS810301
FOCUS
SW302
K0H1BA000442
PUSH AUTO
SW303
K0H1BA000442
AUTO
SW304
K0H1BA000442
INDEX
SW305
K0H1BA000442
USER1
SW306
K0H1BA000442
USER2
D301
MA142WA-GTX
D302
MA142WA-GTX
D303
MA142WA-GTX
D304
MA142WA-GTX
R301
PAT/J3
R302
PAT/J3
U301
Ref No. 300 Series.
COMPONENT NAME
CAMERA OP1
01/01
CIRCUIT BOARD NO.
VEP06E92A
DRAWING NO.
KR6V43 (1/1) (0)
SCM022



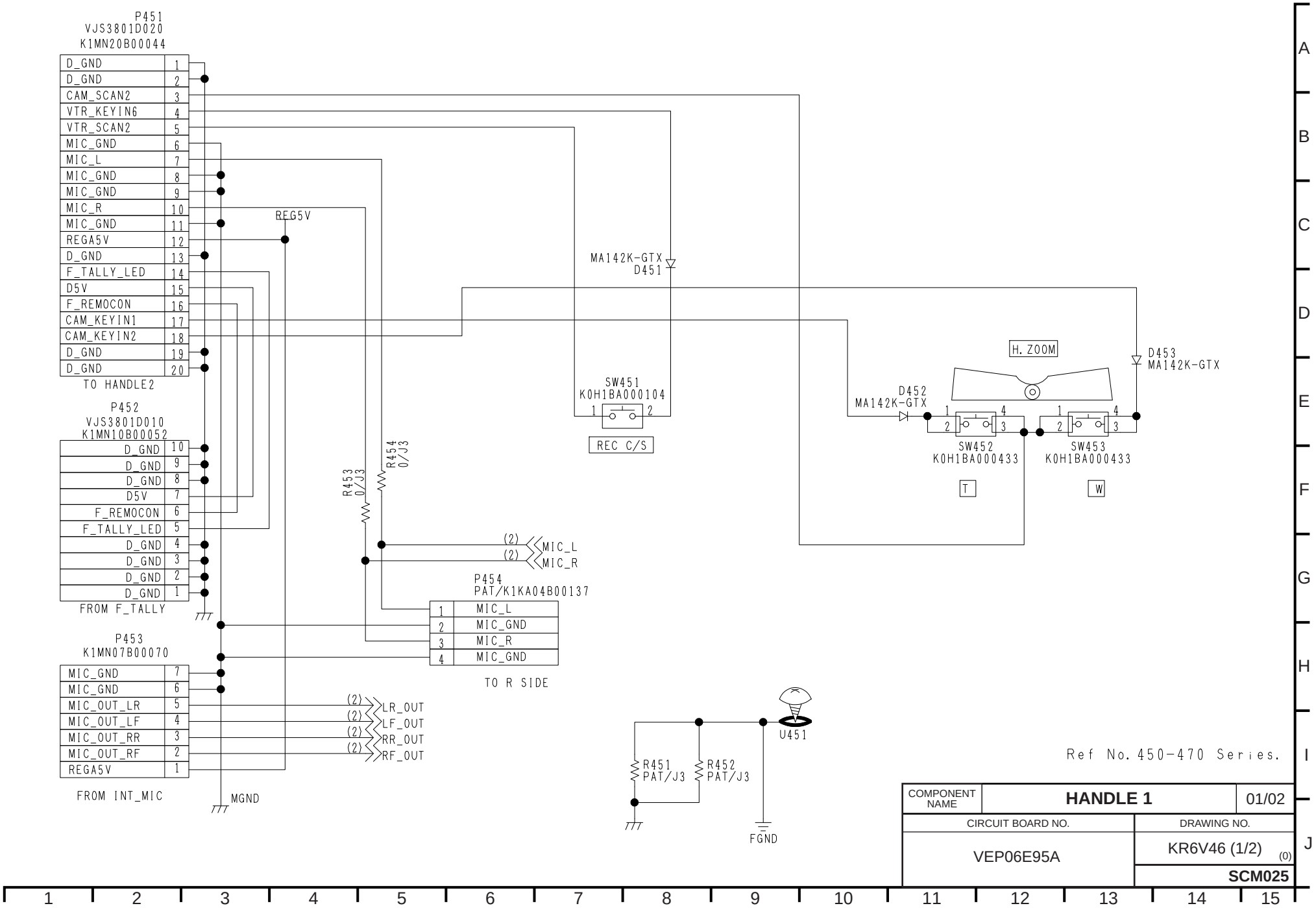
COMPONENT NAME	**CAMERA OP2**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP06E93A		KR6V44 (1/1) (0)
		SCM023

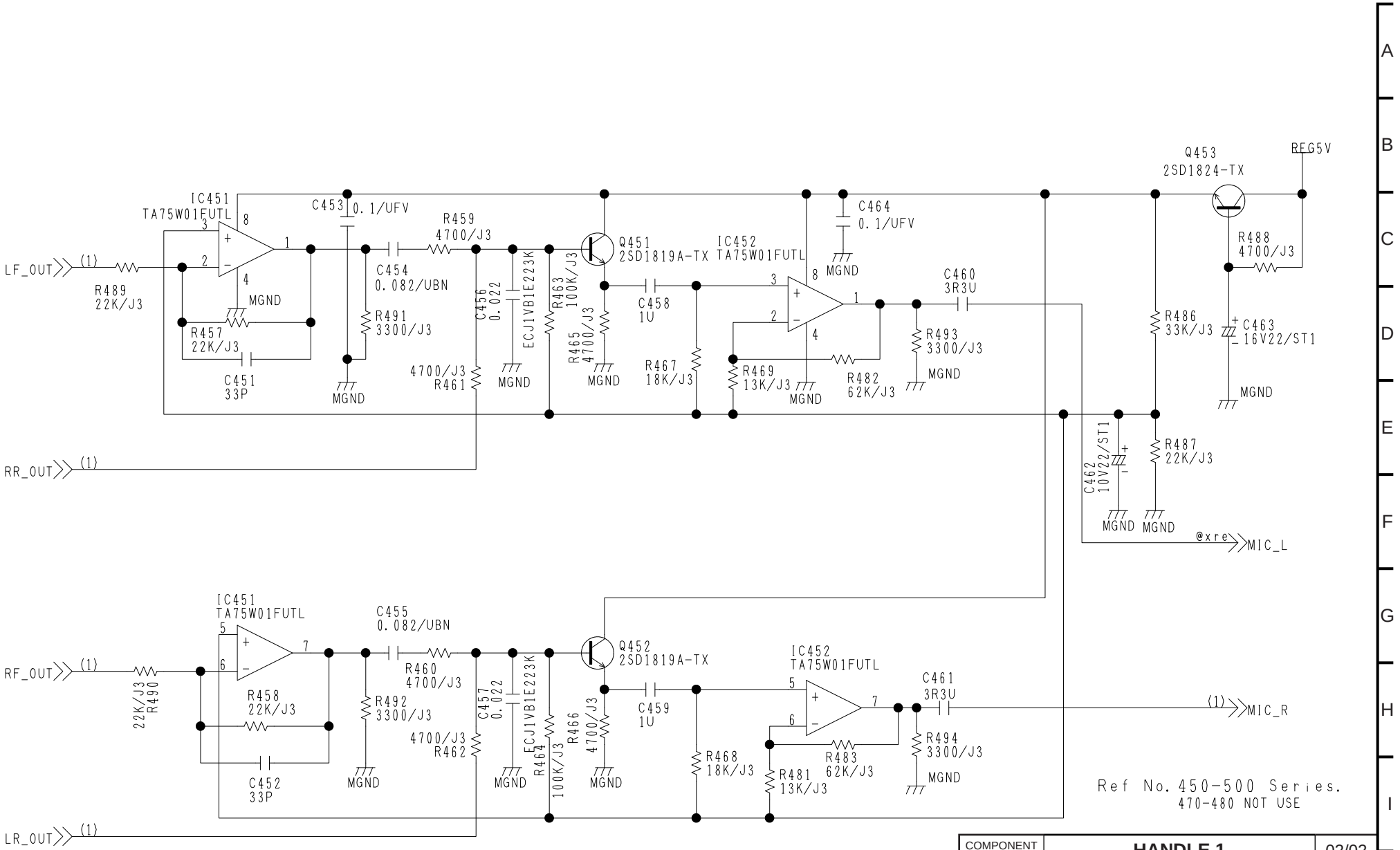




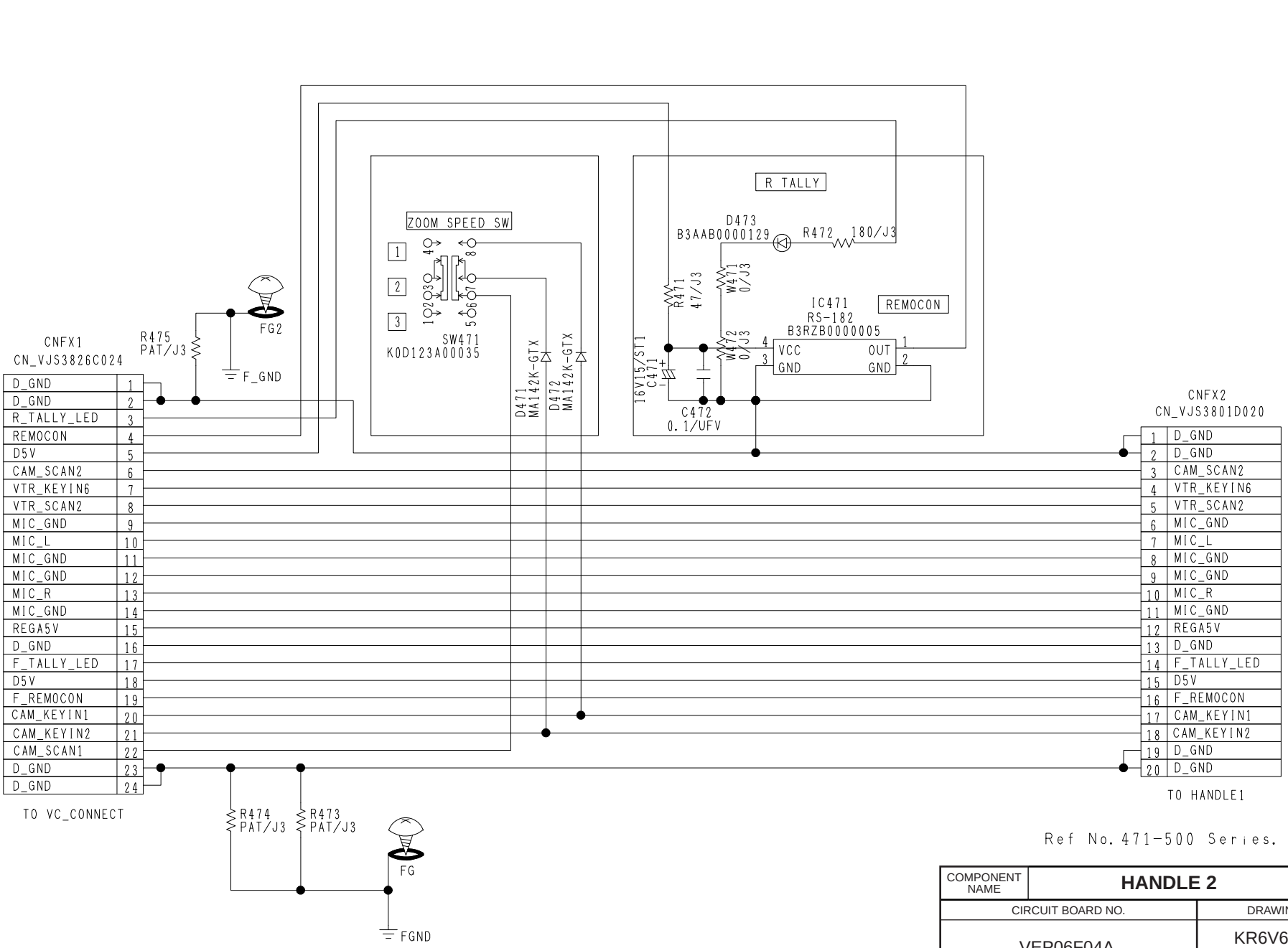
Ref No. 601-650 Series.

COMPONENT NAME	**MENU**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP000Z0A		KR0S74 (1/1) (0)
		SCM024


P451
VJS3801D020
K1MN20B00044
D_GND 1
D_GND 2
CAM_SCAN2 3
VTR_KEYIN6 4
VTR_SCAN2 5
MIC_GND 6
MIC_L 7
MIC_GND 8
MIC_GND 9
MIC_R 10
MIC_GND 11
REGA5V 12
D_GND 13
F_TALLY_LED 14
D5V 15
F_REMOCON 16
CAM_KEYIN1 17
CAM_KEYIN2 18
D_GND 19
D_GND 20
TO HANDLE2
P452
VJS3801D010
K1MN10B00052
D_GND 10
D_GND 9
D_GND 8
D5V 7
F_REMOCON 6
F_TALLY_LED 5
D_GND 4
D_GND 3
D_GND 2
D_GND 1
FROM F_TALLY
P453
K1MN07B00070
MIC_GND 7
MIC_GND 6
MIC_OUT_LR 5
MIC_OUT_LF 4
MIC_OUT_RR 3
MIC_OUT_RF 2
REGA5V 1
FROM INT_MIC
REG5V
MGND
MA142K-GTX
D451
SW451
K0H1BA000104
REC C/S
R453
0/J3
R454
0/J3
(2) MIC_L
(2) MIC_R
P454
PAT/K1KA04B00137
1 MIC_L
2 MIC_GND
3 MIC_R
4 MIC_GND
TO R SIDE
(2) LR_OUT
(2) LF_OUT
(2) RR_OUT
(2) RF_OUT
U451
R451
PAT/J3
R452
PAT/J3
FGND
H. ZOOM
D452
MA142K-GTX
D453
MA142K-GTX
SW452
K0H1BA000433
T
SW453
K0H1BA000433
W
Ref No. 450-470 Series.
COMPONENT NAME
HANDLE 1
01/02
CIRCUIT BOARD NO.
VEP06E95A
DRAWING NO.
KR6V46 (1/2) (0)
SCM025

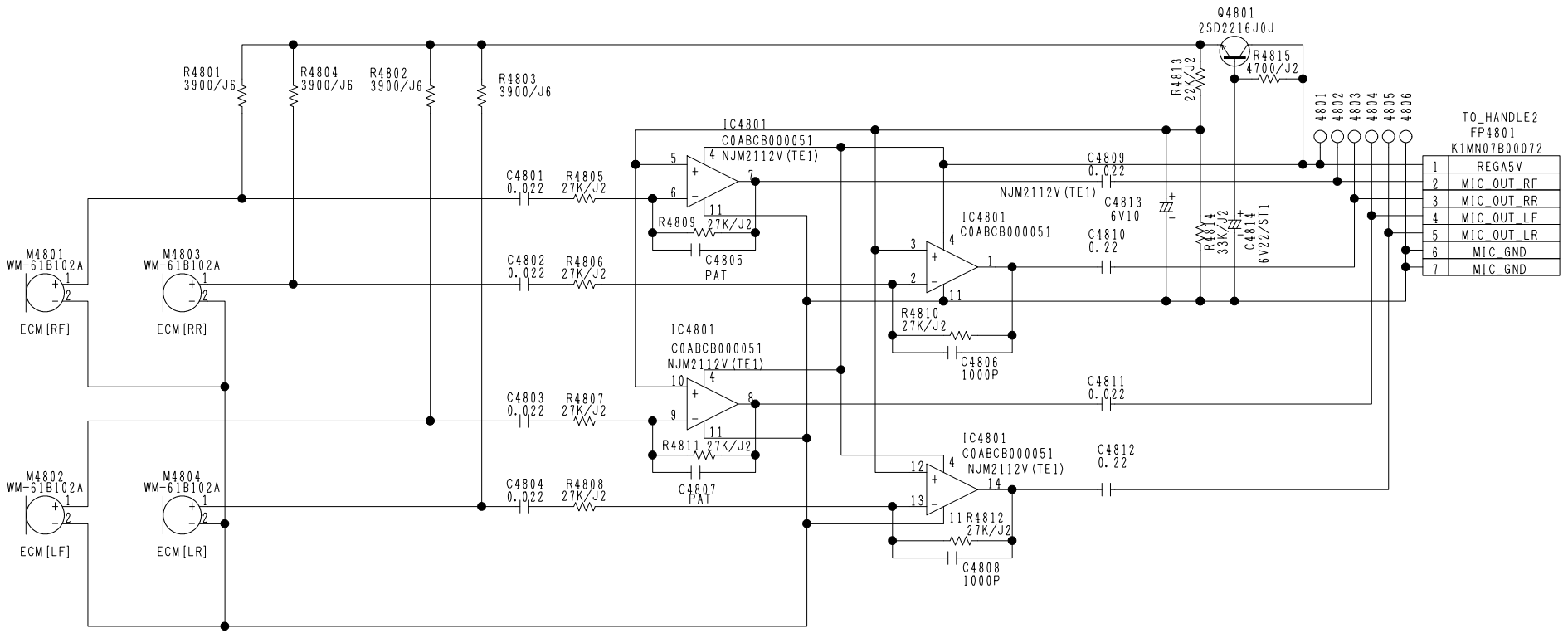


COMPONENT NAME	HANDLE 1	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06E95A		KR6V46 (2/2) (0)
		SCM026



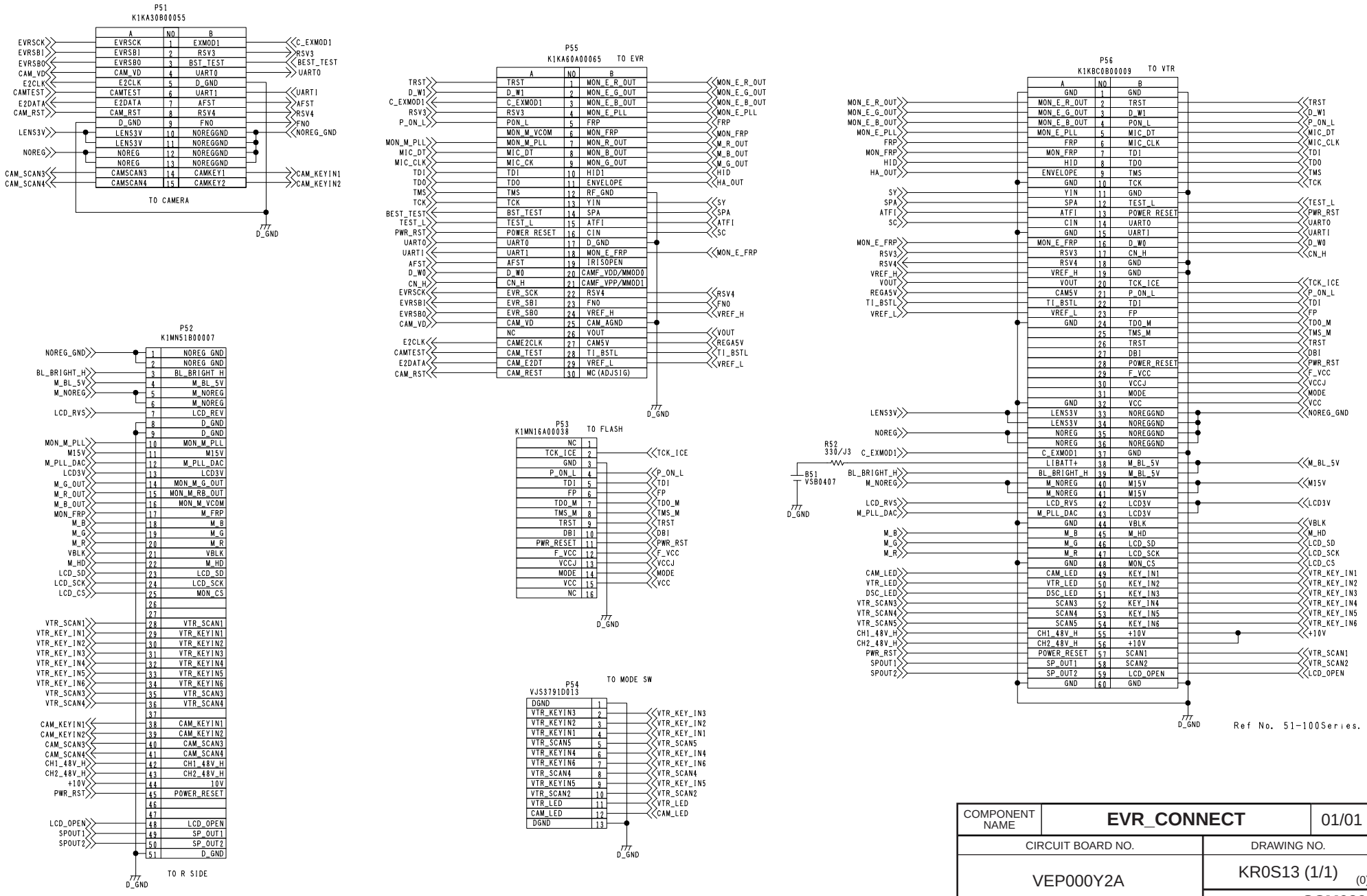
Ref No. 471-500 Series.

COMPONENT NAME	HANDLE 2	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP06F04A		KR6V62 (1/1) (0)
		SCM027

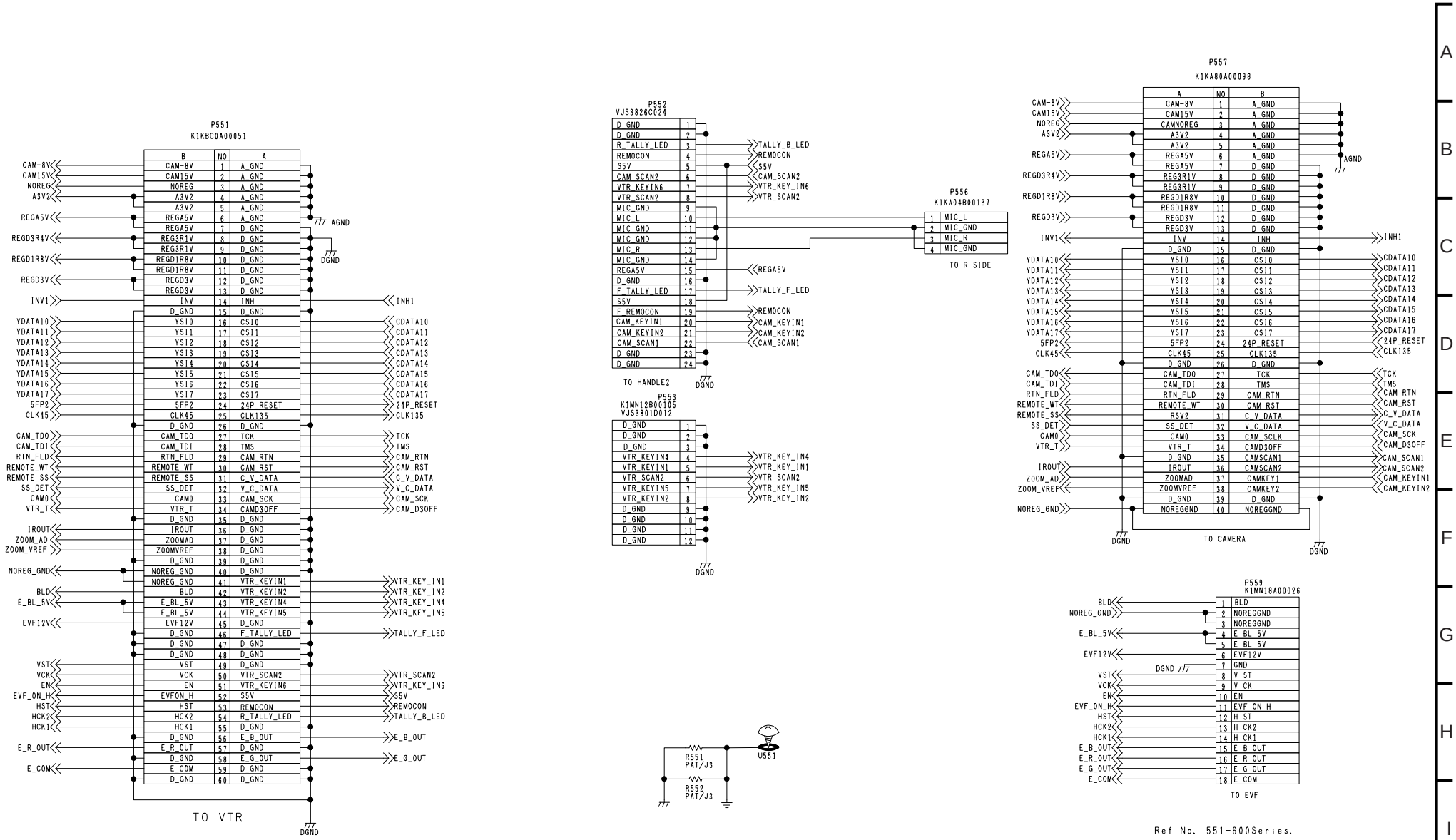


Ref No. 4800 Series.

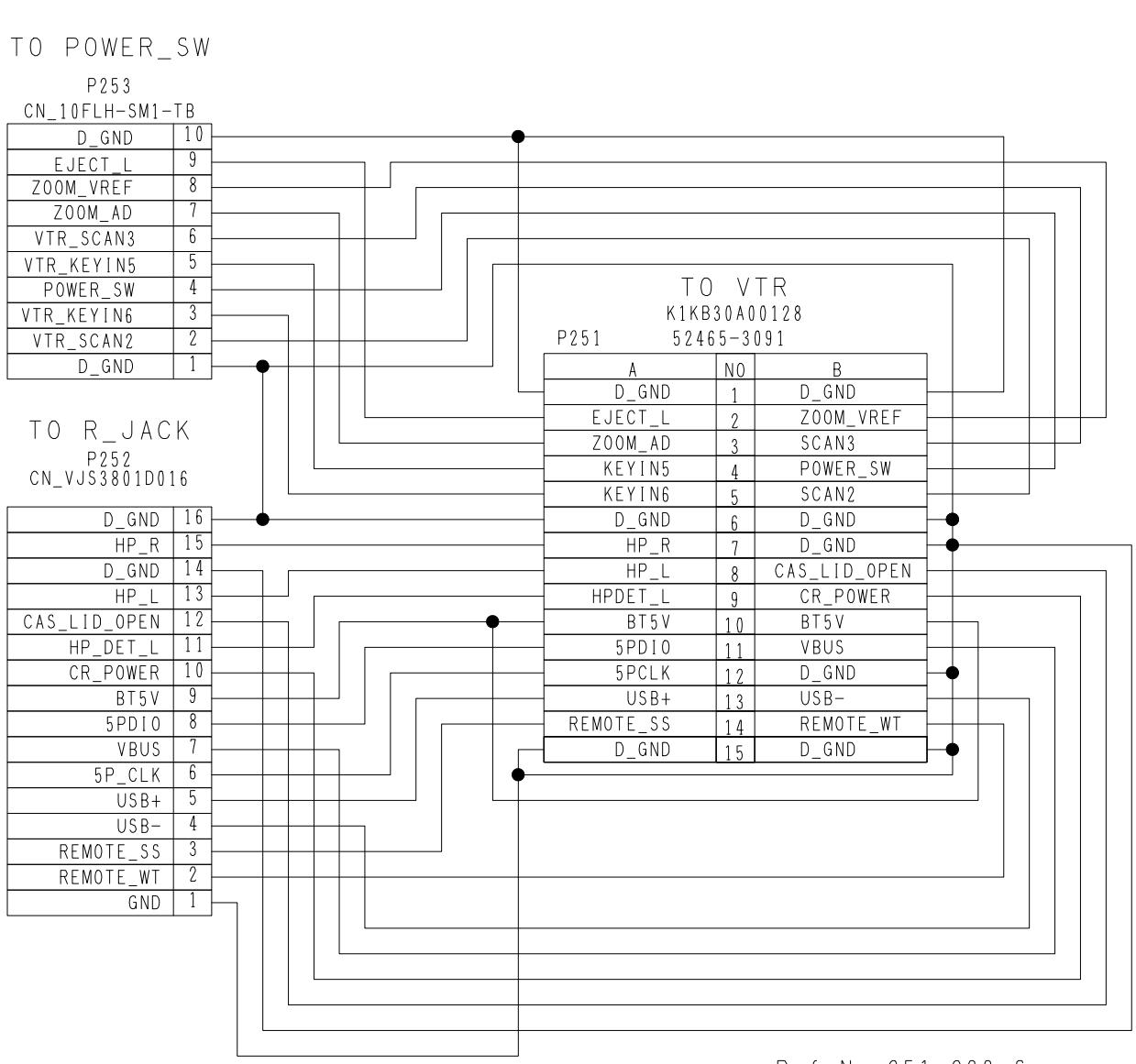
COMPONENT NAME	MIC	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP04828A		KR4L33 (1/1) (0)
		SCM028



COMPONENT NAME	EVR_CONNECT
	01/01
CIRCUIT BOARD NO.	DRAWING NO.
VEP000Y2A	KR0S13 (1/1) (0)
	SCM029



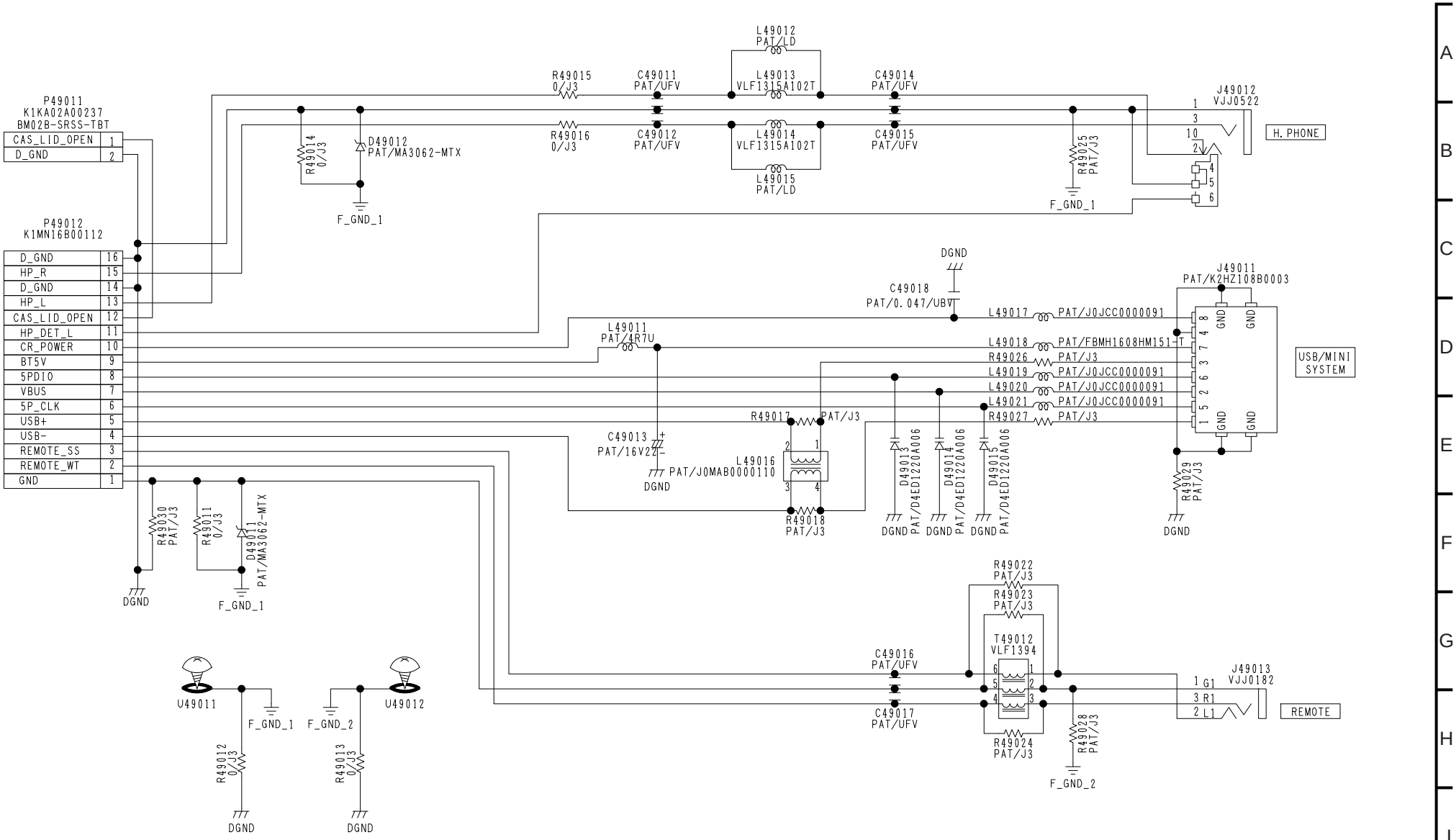
COMPONENT NAME	VC_CONNECT	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Y3A	KR0S14 (1/1) (0)	
	SCM030	



COMPONENT NAME	REAR JACK CONNECT FLEX	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Y6A	KR0S33 (1/1) (0)	
	SCM031	

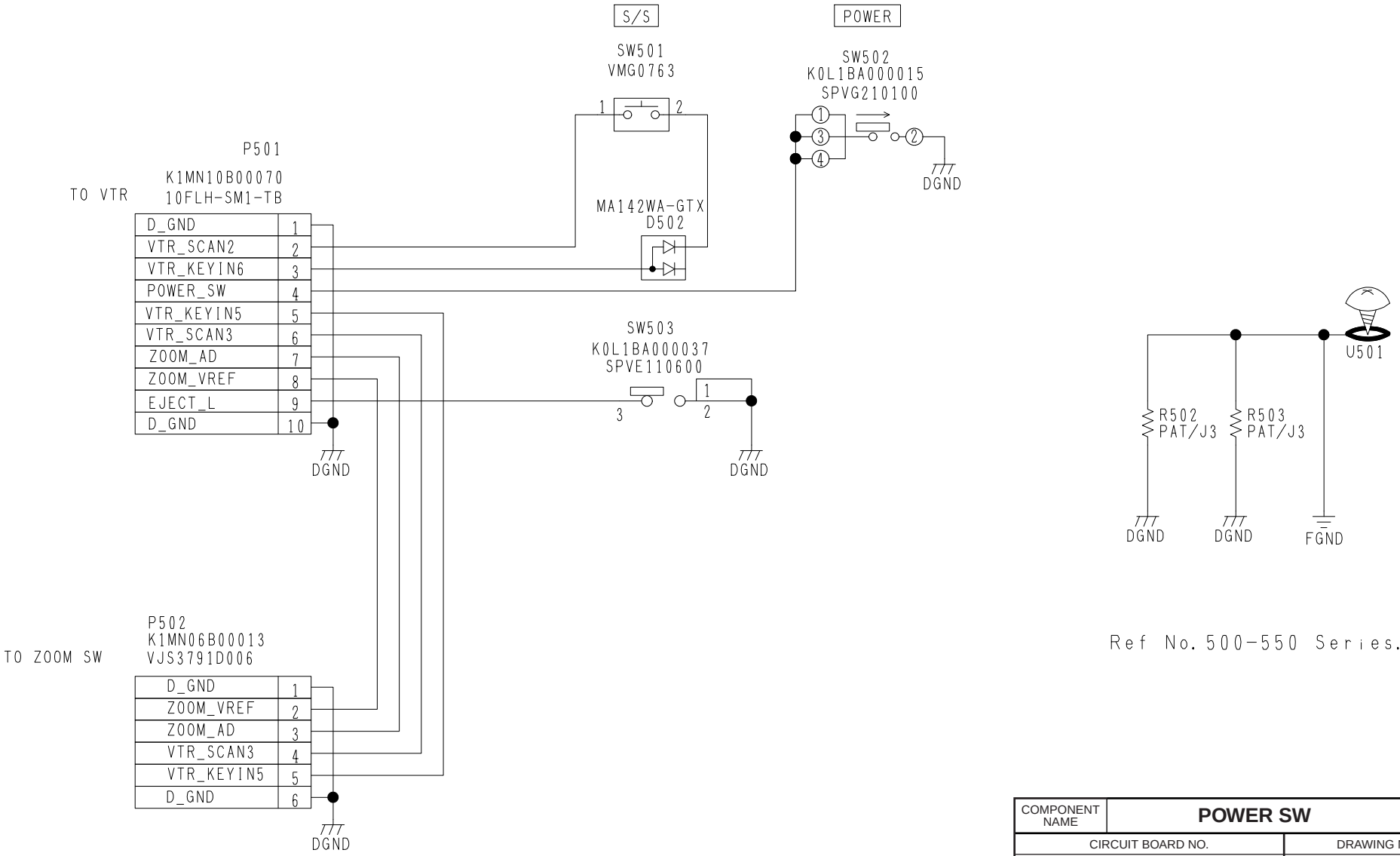
A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



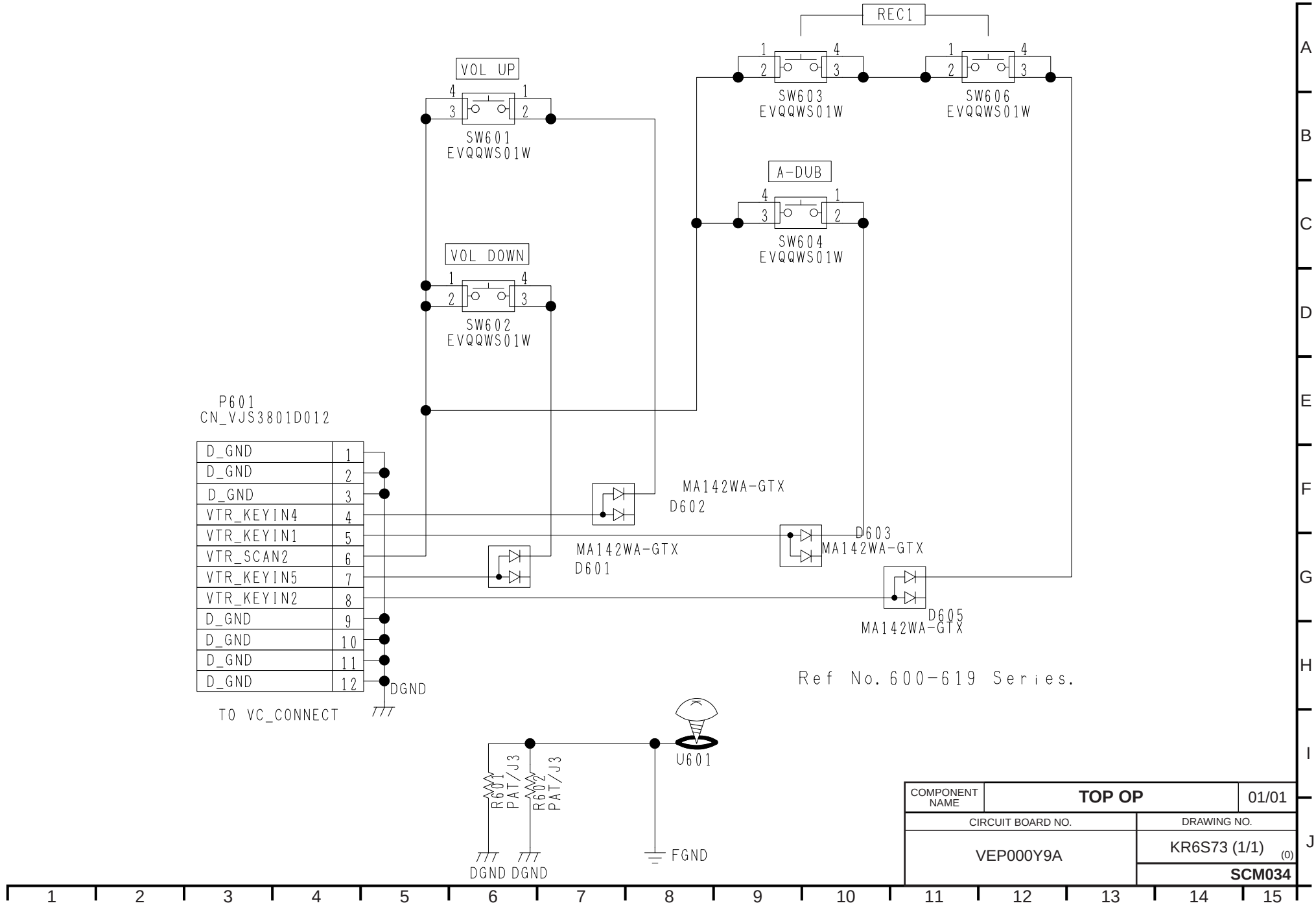
Ref No. 49000 Series.

COMPONENT NAME	REAR JACK	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP04819A		KR4I04 (1/1) (0)
		SCM032

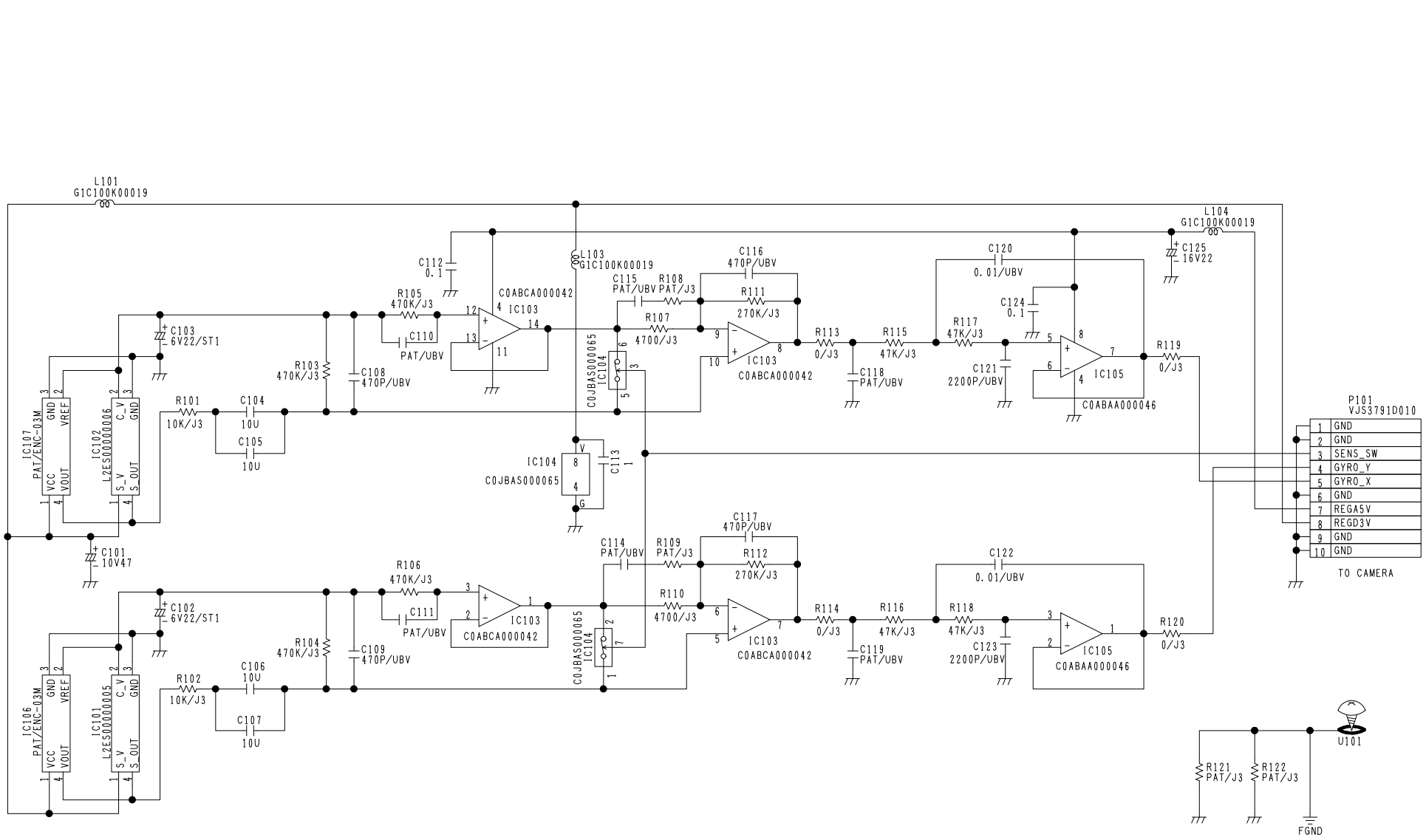


Ref No. 500-550 Series.

COMPONENT NAME	**POWER SW**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP06E96A	KR6V47 (1/1) (0)	
	SCM033	

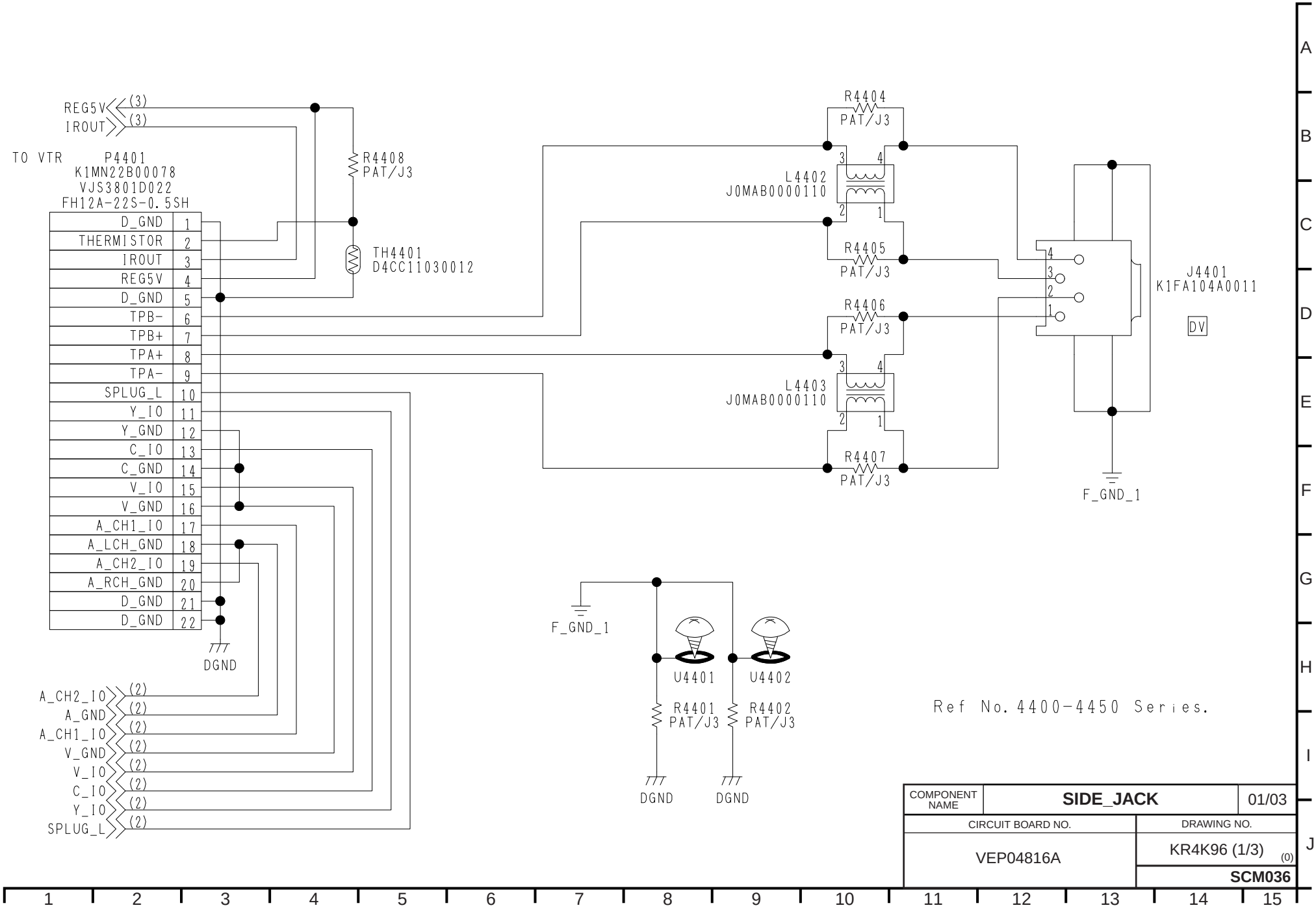


COMPONENT NAME	**TOP OP**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Y9A	KR6S73 (1/1) (0)	
	SCM034	

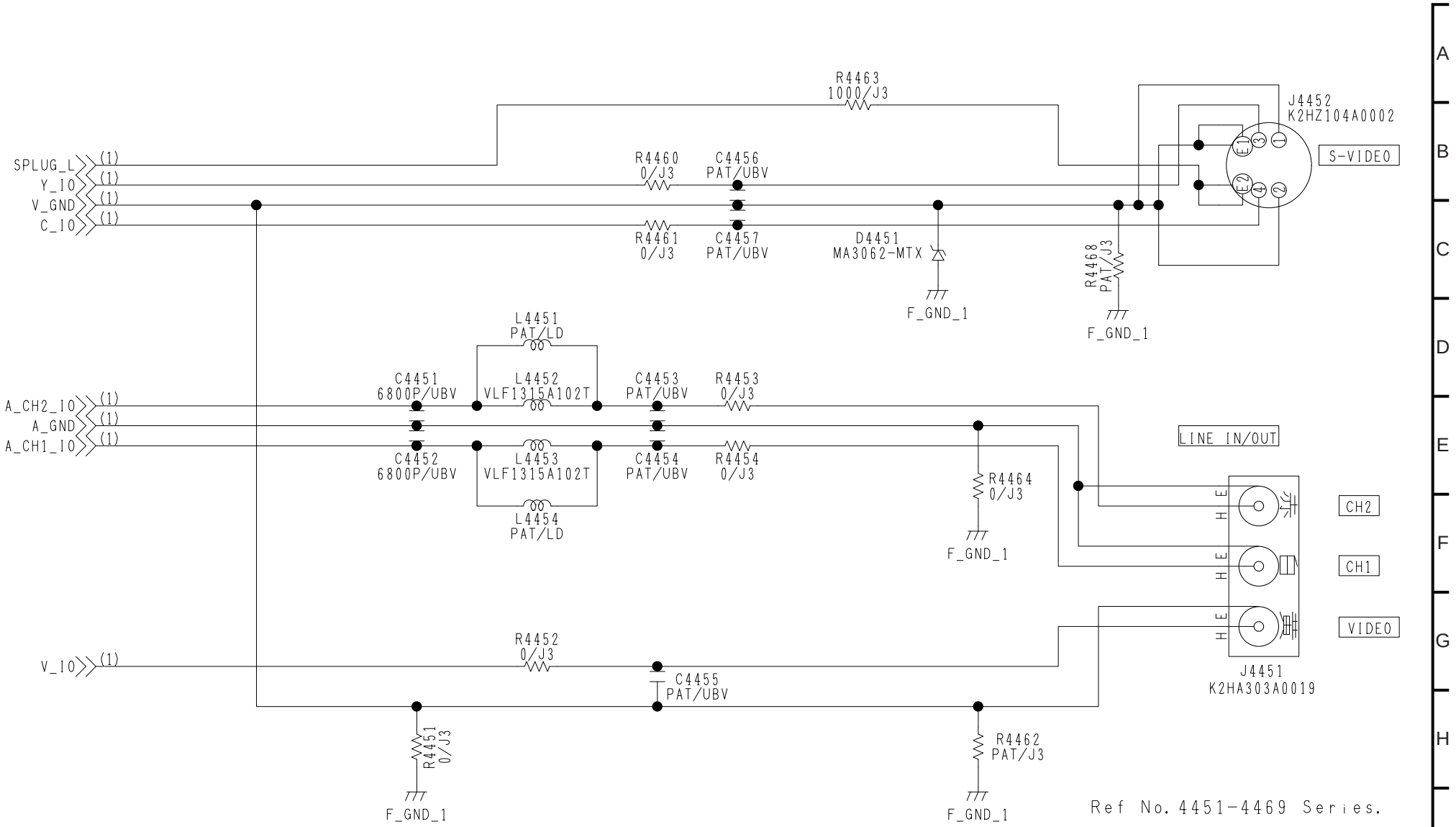


Ref No. 100 Series.

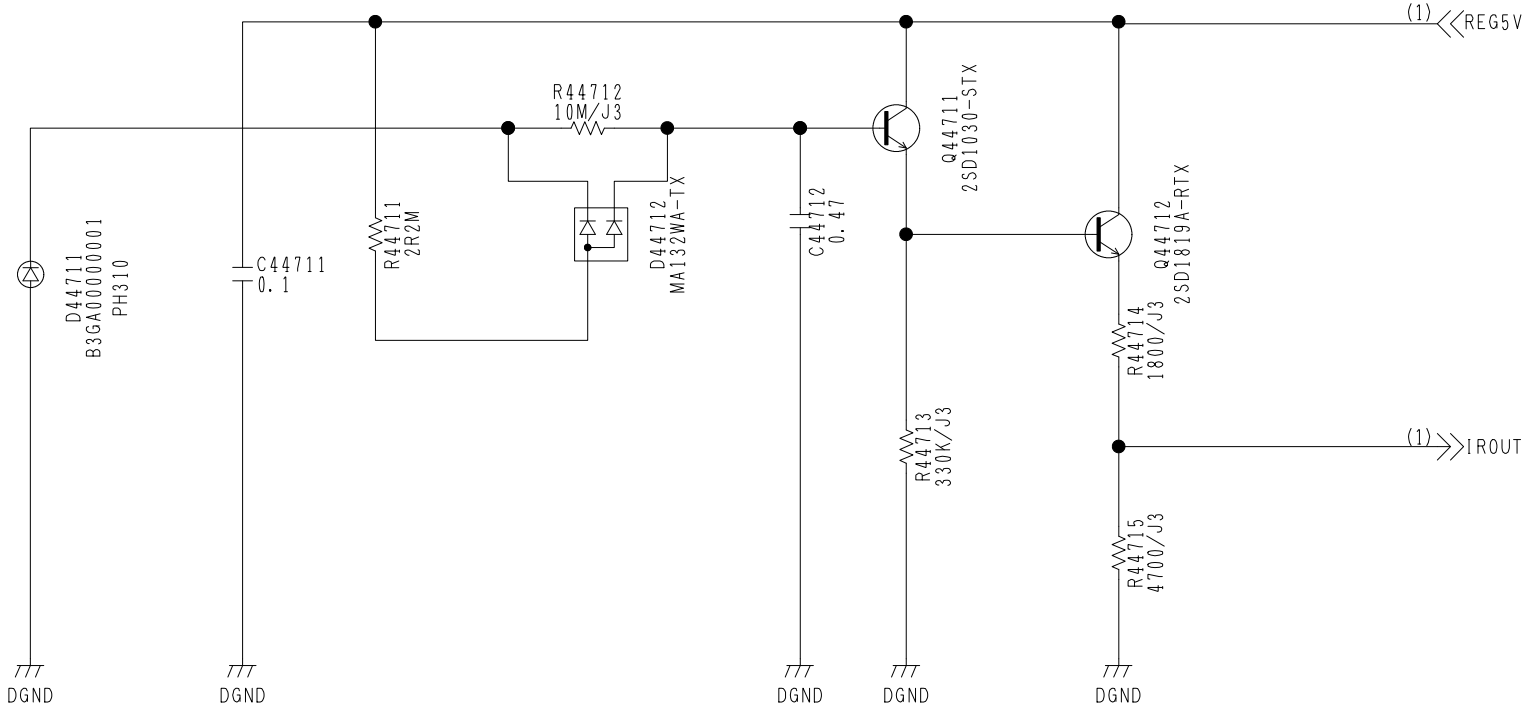
COMPONENT NAME	GYRO	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP22331A		KR2E68 (1/1) (0)
		SCM035



COMPONENT NAME	SIDE_JACK	01/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04816A		KR4K96 (1/3) (0)
		SCM036



COMPONENT NAME	SIDE_JACK	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04816A		KR4K96 (2/3) (0)
		SCM037

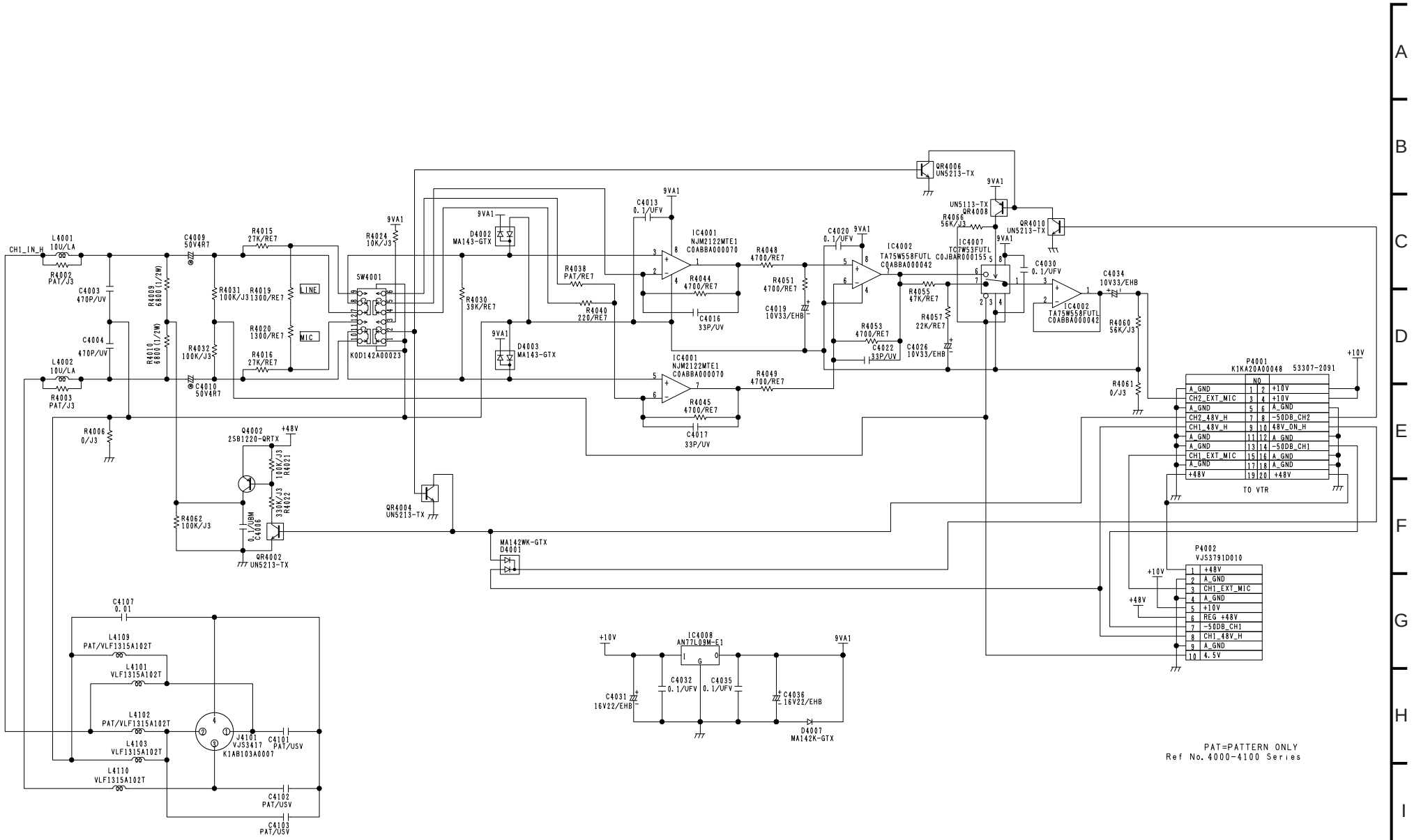


Ref No. 4470-4500 Series

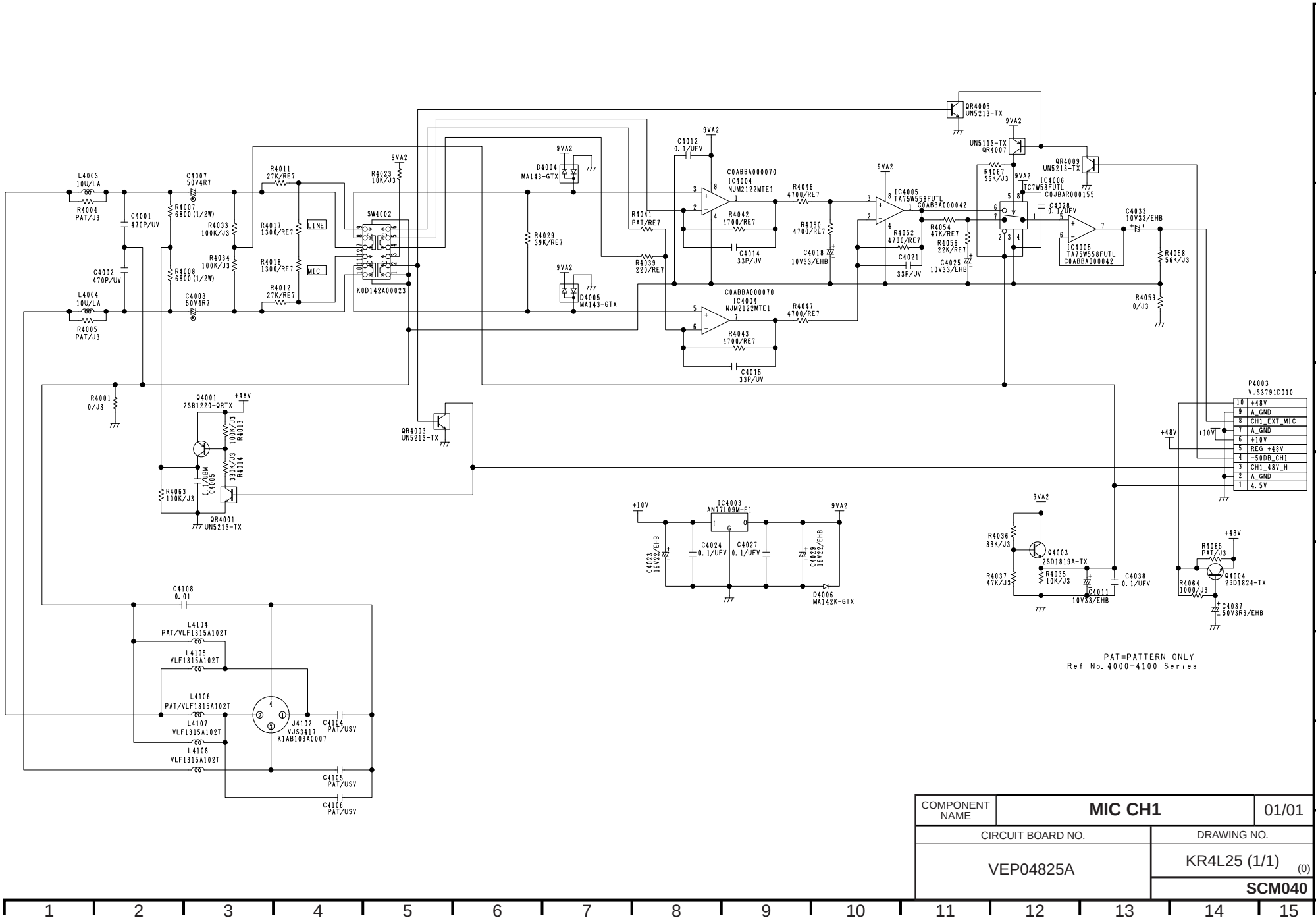
COMPONENT NAME	**SIDE_JACK**	03/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04816A		KR4K96 (3/3) (0)
		SCM038

A B C D E F G H I J

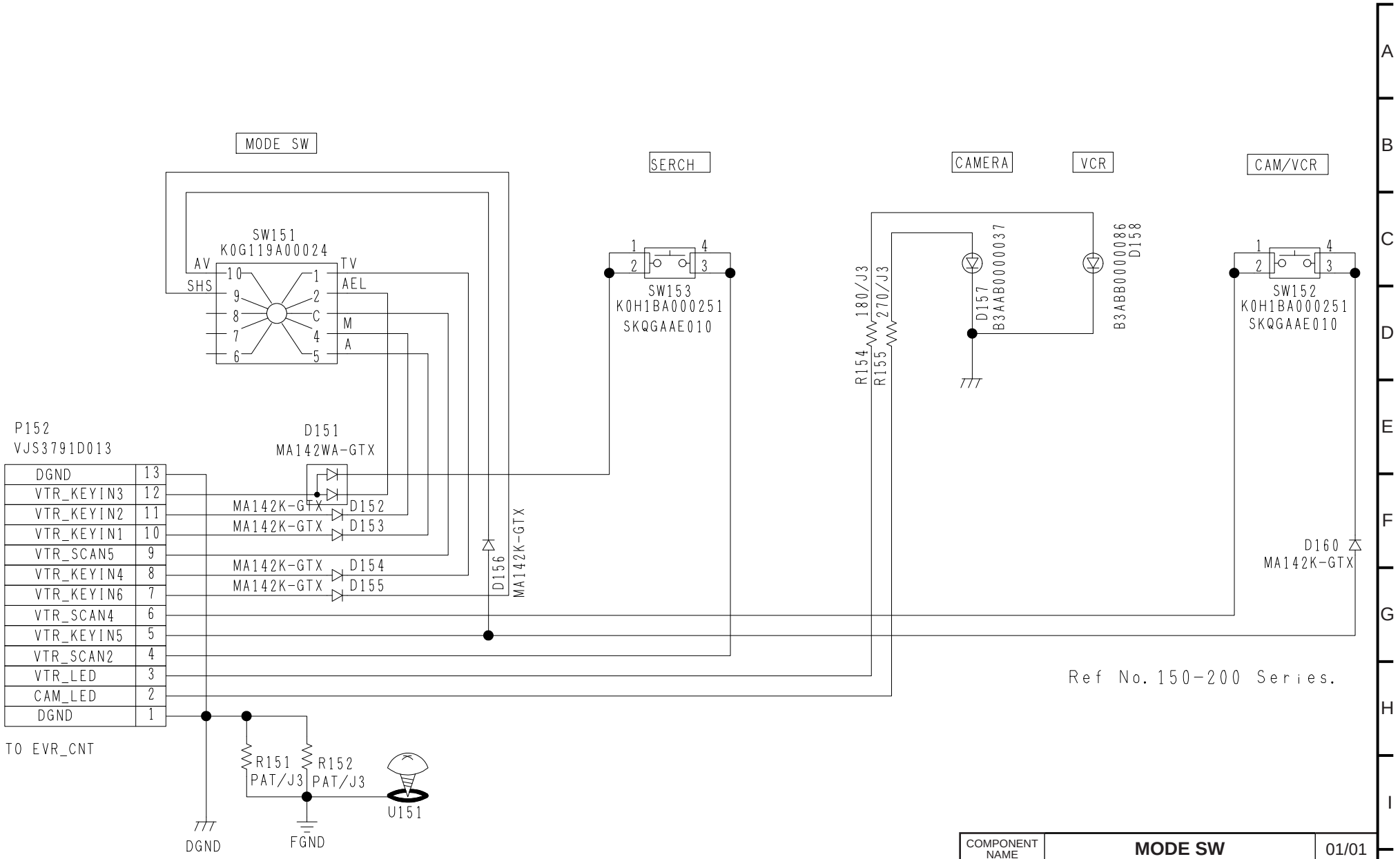
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



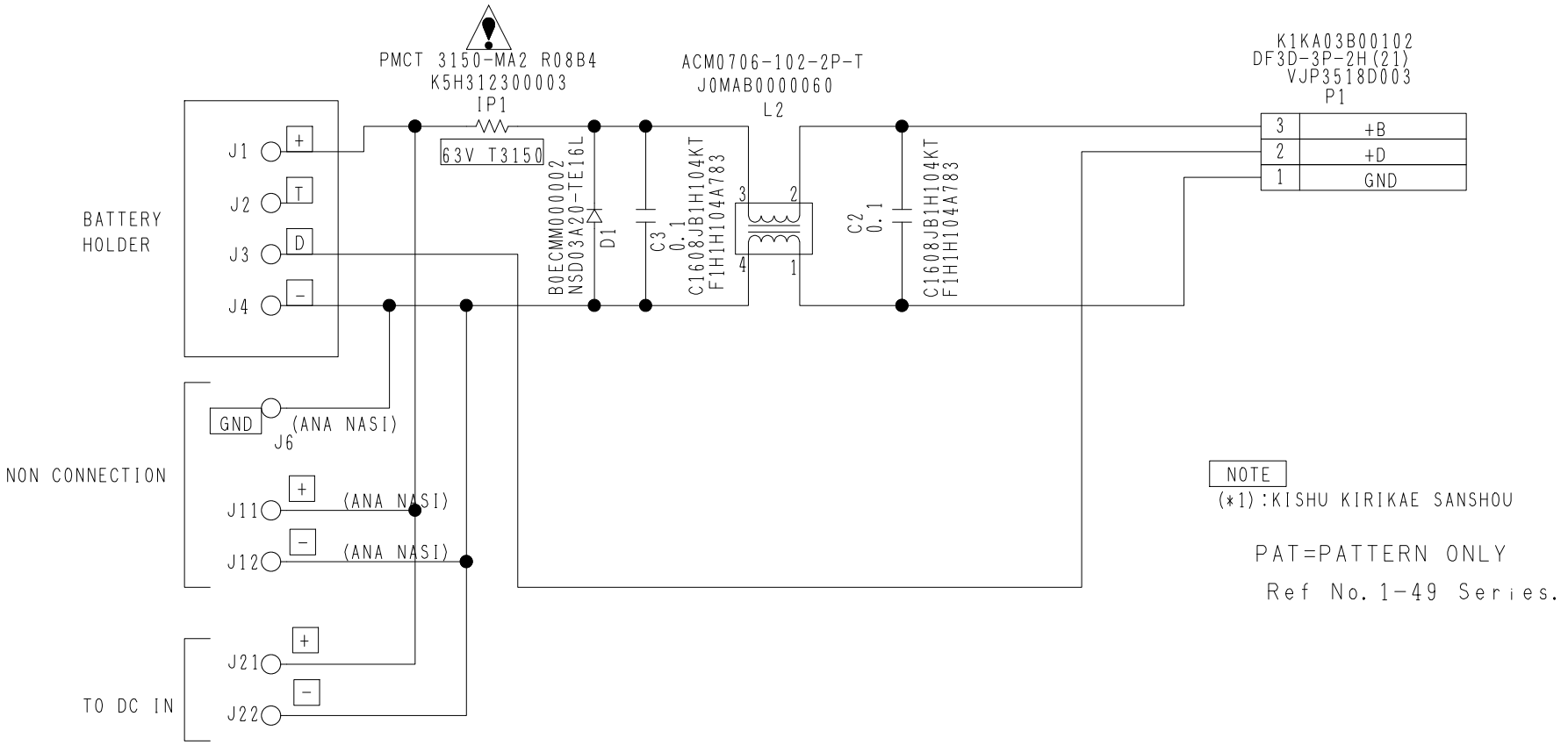
COMPONENT NAME	**MIC CH2**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP04815A		KR4K95 (1/1) (0)
		SCM039



COMPONENT NAME	**MIC CH1**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP04825A	KR4L25 (1/1) (0)	
	SCM040	



COMPONENT NAME	MODE SW	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP06E89A		KR6V40 (1/1) (0)
		SCM041

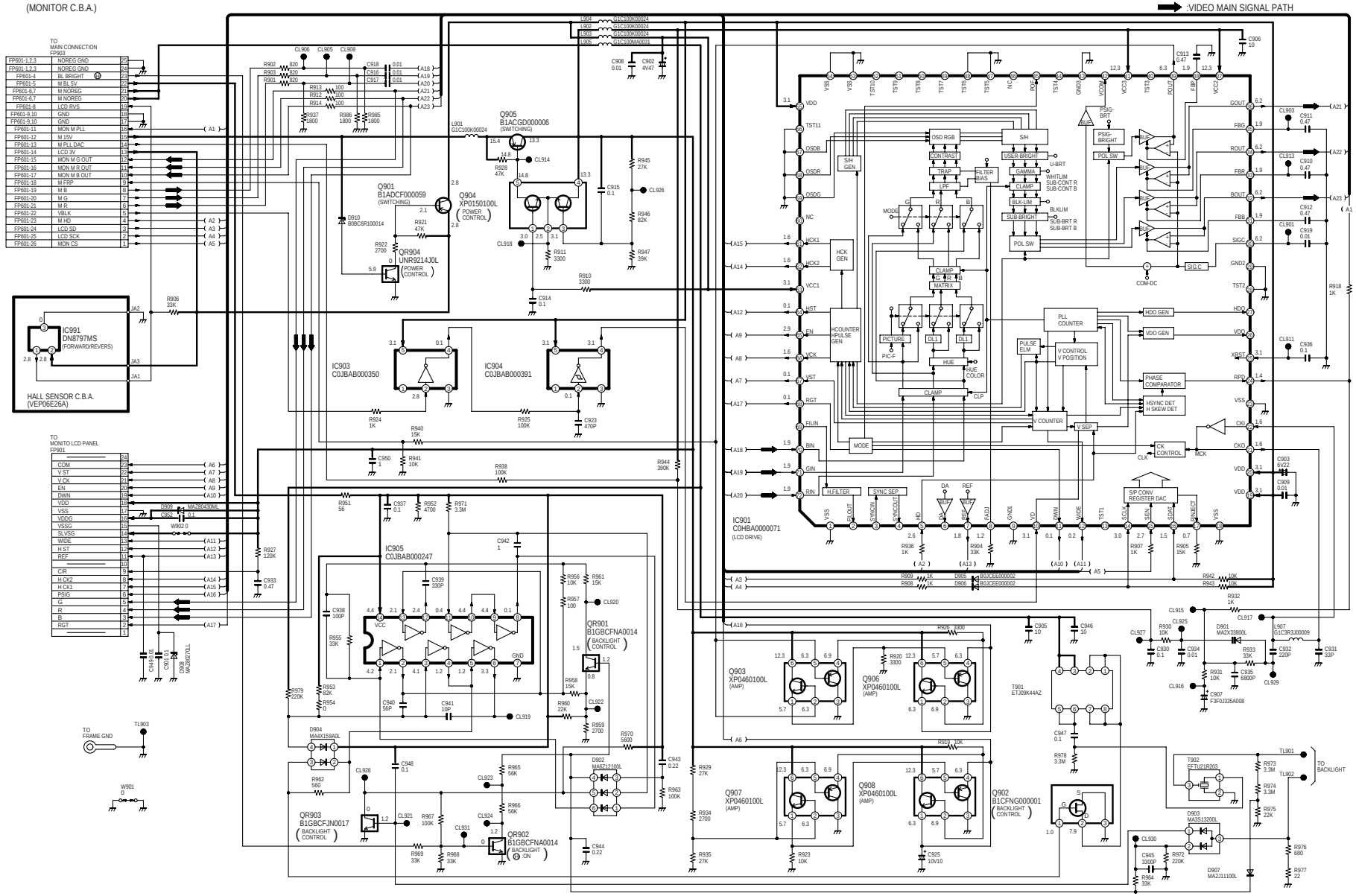


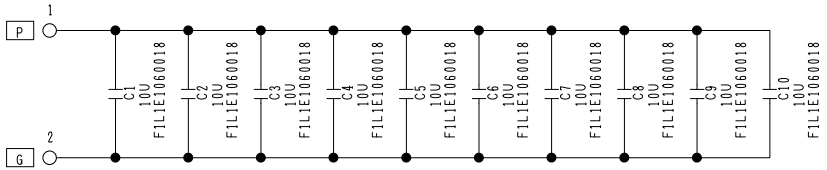
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

⚠ 警 告

⚠ 印の部品は安全上重要な部品です。
交換するときは、安全上および性能維持のため
必ず指定の部品をご使用ください。

COMPONENT NAME	BATTERY	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP01915A		KR1F83 (1/1) (0)
		SCM042


(MONITOR C.B.A.)
:VIDEO MAIN SIGNAL PATH
TO MAIN CONNECTION FP903
TO MONITO LCD PANEL FP901
IC901 C0HBA0000071 (LCD DRIVE)
IC903 C0JBAB000350
IC904 C0JBAB000391
IC905 C0JBAB000247
IC991 DN8797MS (FORWARD/REVERS)
HALL SENSOR C.B.A. (VEP06E26A)
Q901 B1ADCF000059 (SWITCHING)
Q904 XP0150100L (POWER CONTROL)
QR904 UNR9214J0L (POWER CONTROL)
Q905 B1ACGD000006 (SWITCHING)
QR901 B1GBCFNA0014 (BACKLIGHT CONTROL)
QR902 B1GBCFNA0014 (BACKLIGHT CONTROL)
QR903 B1GBCFJN0017 (BACKLIGHT CONTROL)
Q902 B1CFNG000001 (BACKLIGHT CONTROL)
Q903 XP0460100L (AMP)
Q906 XP0460100L (AMP)
Q907 XP0460100L (AMP)
Q908 XP0460100L (AMP)
T901 ETJ09K44AZ
T902 EFTU21R203
TO FRAME GND
TO BACKLIGHT
OSD RGB
S/H
CONTRAST
TRAP
LPF
FILTER BIAS
USER-BRIGHT
GAMMA
CLAMP
BLK-LIM
SUB-BRIGHT
POL SW
PSIG-BRT
PSIG-BRIGHT
U-BRT
WHITLIM
SUB-CONT R
SUB-CONT B
BLKLIM
SUB-BRT R
SUB-BRT B
COM-DC
SIG.C
MODE
HCK GEN
HCOUNTER HPULSE GEN
PICTURE
PIC-F
HUE
HUE COLOR
PLL COUNTER
PULSE ELM
V CONTROL V POSITION
HDO GEN
VDO GEN
PHASE COMPARATOR
HSYNC DET H SKEW DET
V COUNTER
V SEP
CK CONTROL
H.FILTER
SYNC SEP
S/P CONV REGISTER DAC
COMPONENT NAME
MONITOR
01/01
CIRCUIT BOARD NO.
VEP26257A
DRAWING NO.
KR***** (1/1)
(0)
SCM043



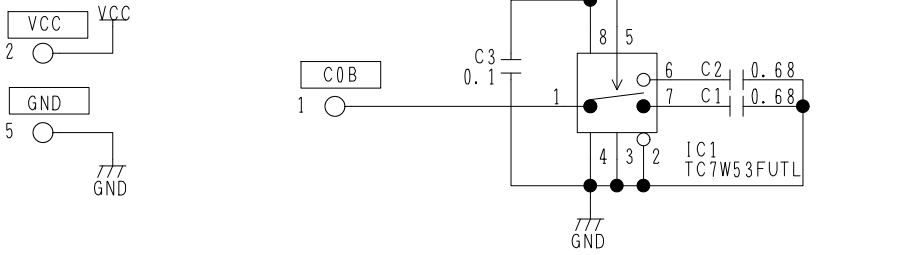
COMPONENT NAME	VTR_SUB	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP001A4A	KR0T43 (1/1) (0)	
	SCM044	

NOTE
(*1):KISHU KIRIKAE SANSHOU

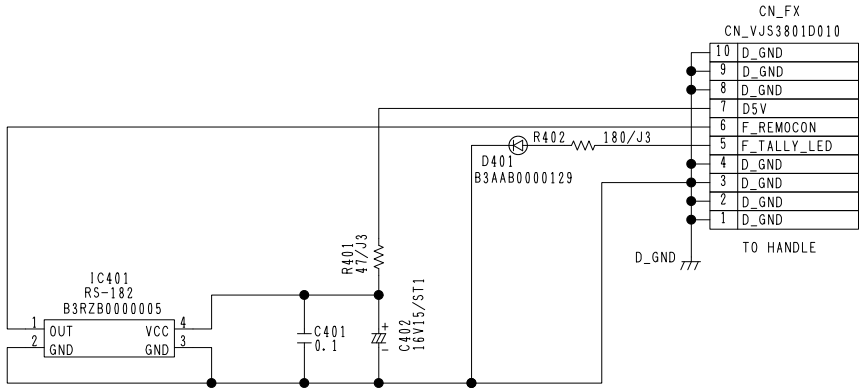
PAT=PATTERN ONLY

Ref No. 1-49 Series.

COMPONENT NAME	POWER SUB	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP001A6A	KR0T47 (1/1) (0)	
	SCM044	



COMPONENT NAME	CAMERA SUB	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP001A7A	KR0T48 (1/1) (0)	
	SCM044	

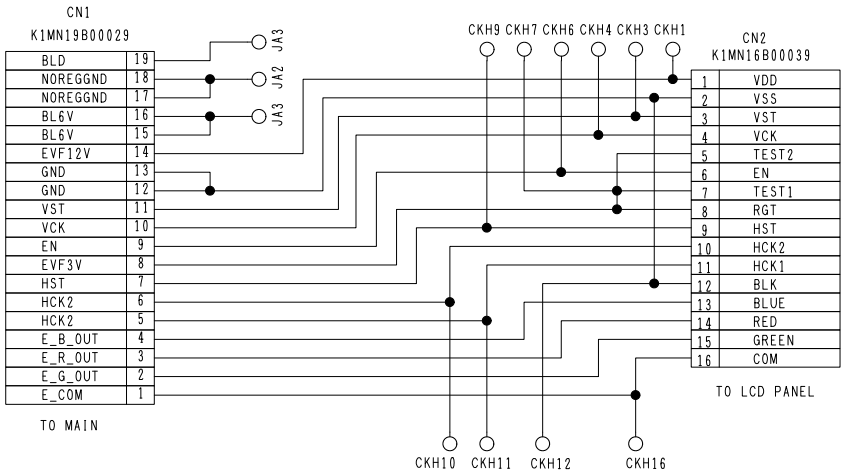


Ref No. 400-450 Series.

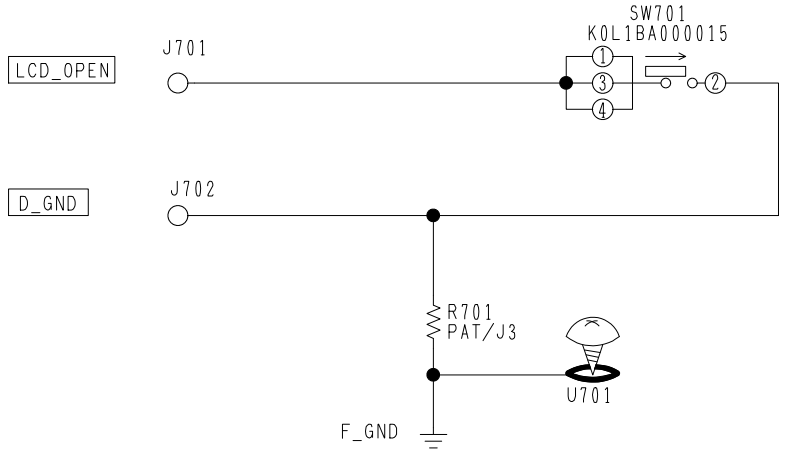
COMPONENT NAME	F_TALLY	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP06E94A	KR6V45 (1/1) (0)	
	SCM044	

A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

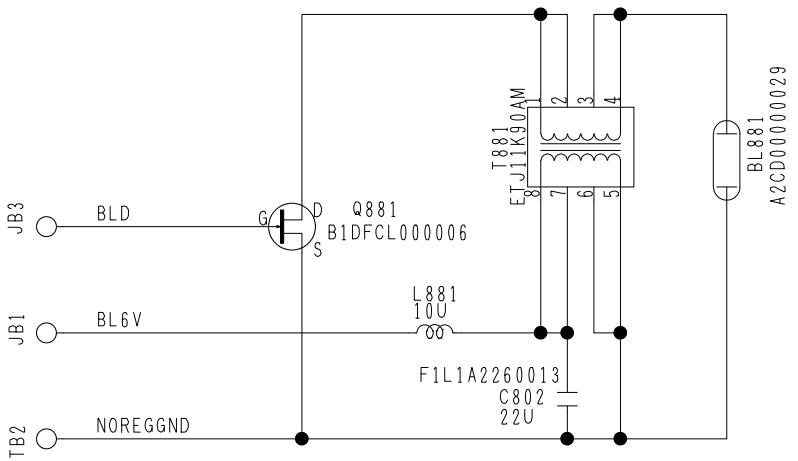


COMPONENT NAME	EVF_A	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP28272B	KR8840 (1/1) (0)	
	SCM045	

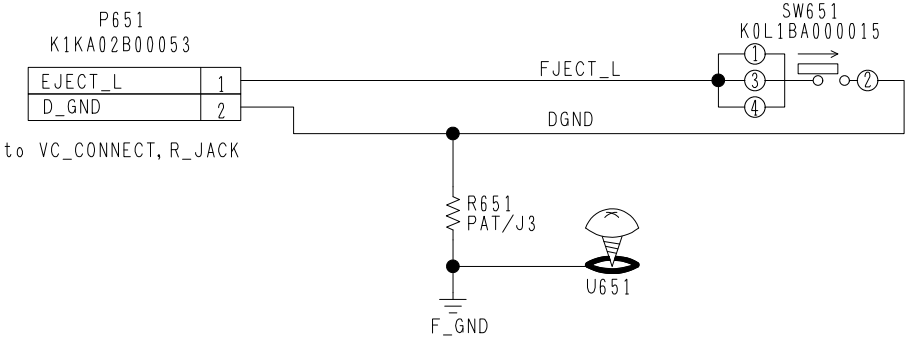


Ref No. 701-709 Series.

COMPONENT NAME	LCD_OPEN_SW	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Y4A	KR0S20 (1/1) (0)	
	SCM045	

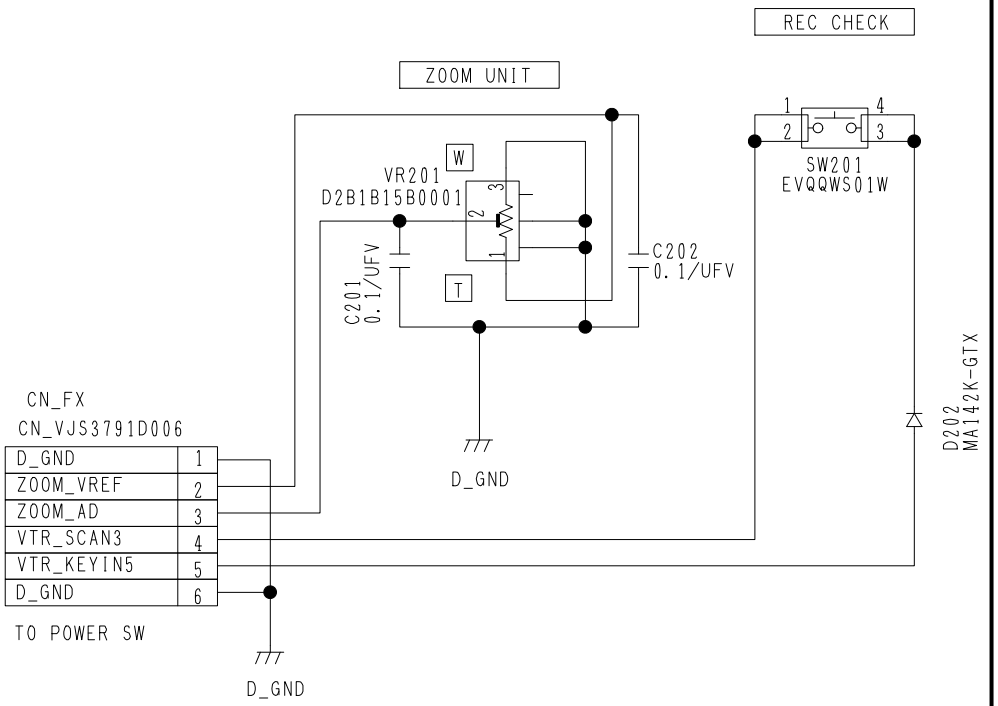


COMPONENT NAME	EVF_B	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP28275B	KR8841 (1/1) (0)	
	SCM045	



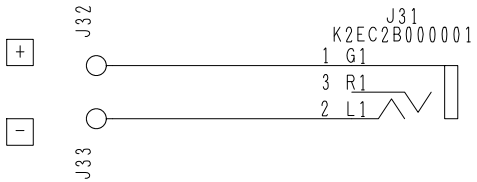
Ref No. 651-699 Series.

COMPONENT NAME	EJECT	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000Y7A	KR0S34 (1/1) (0)	
	SCM045	



Ref No. 201–250 Series.

COMPONENT NAME	ZOOM SW	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP06E90A	KR6V41 (1/1) (0)	
	SCM046	



Ref No. 31–49 Series

COMPONENT NAME	DC_IN	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP01923A	KR1F95 (1/1) (0)	
	SCM046	

SECTION 7

CIRCUIT BOARD DIAGRAMS

NOTE:
BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST, SECTION 8

CAUTION

THE ▭ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
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WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

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VTR C.B.A. (VEP03G21A) CBA-1
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POWER C.B.A. (VEP01914A) CBA-5
R SIDE C.B.A. (VEP04817A) CBA-6
CAMERA OP1 FLEX C.B.A. (VEP06E92A) ...CBA-7
CAMERA OP2 FLEX C.B.A. (VEP06E93A) ...CBA-8
REAR JACK C.B.A. (VEP04819A).....CBA-9
POWER SW C.B.A. (VEP06E96A) CBA-10
SIDE JACK C.B.A. (VEP04816A) CBA-11
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POWER SUB C.B.A. (VEP001A6A).....CBA-15
POWER 2 C.B.A. (VEP01922A) CBA-15
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MENU C.B.A. (VEP000Z0A) CBA-16
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HANDLE 2 FLEX C.B.A. (VEP06F04A) CBA-17
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EVR CONNECT C.B.A. (VEP000Y2A).....CBA-19
LCD OPEN C.B.A. (VEP000Y4A) CBA-19
EJECT C.B.A. (VEP000Y7A) CBA-19
ZOOM SW FLEX C.B.A. (VEP06E90A) CBA-20
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(VEP000Y6A).....CBA-21
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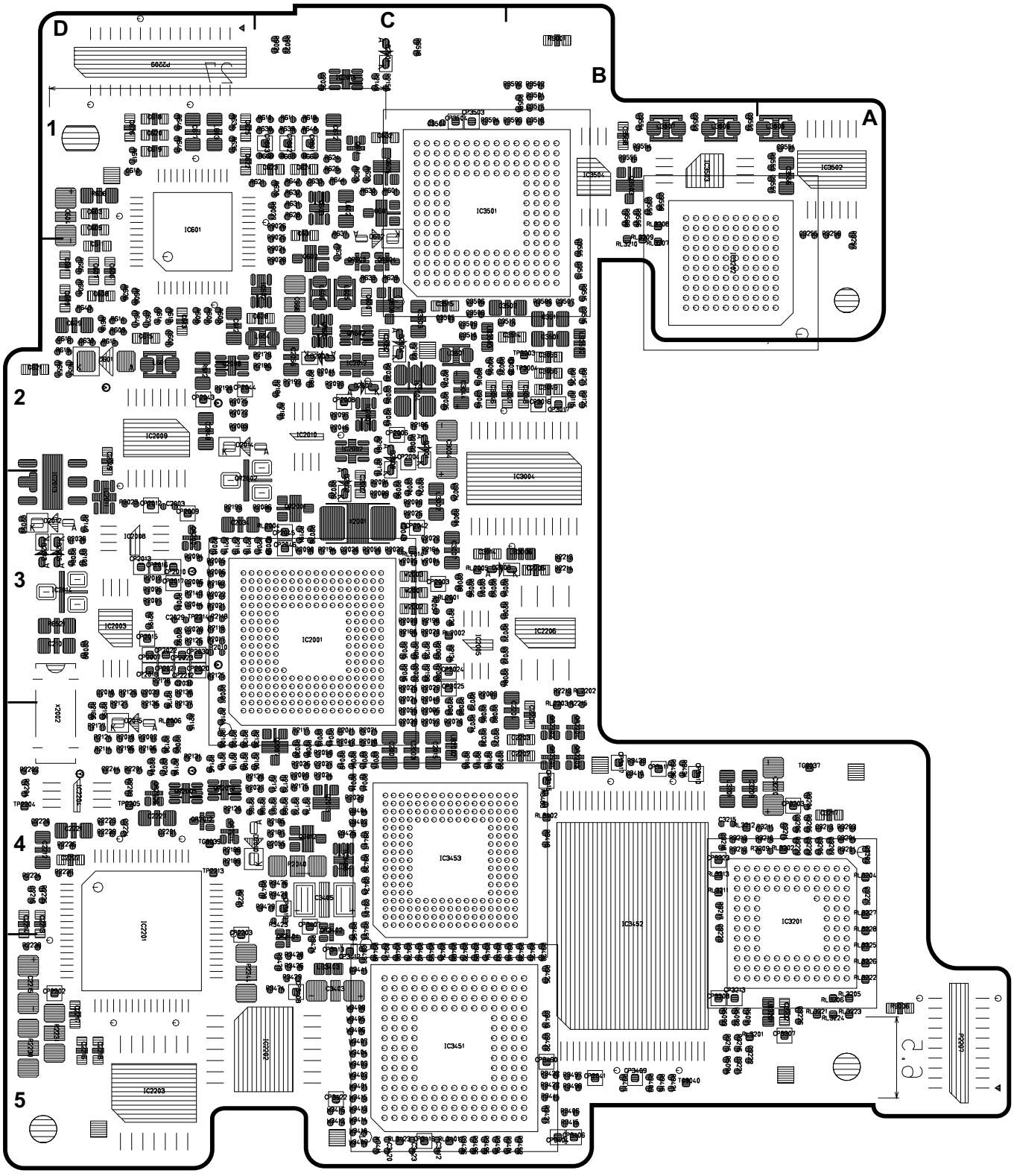
EVF B C.B.A. (VEP28275B).....CBA-22
MONITOR C.B.A. (VEP26257A) CBA-23

VTR C.B.A. (VEP03G21A)

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC601	D1	IC2002	C2	IC2011	D3	IC3202	B2	QR601	C2	QR2012	D4	TP2213	D4
IC602	C2	IC2012	C2	IC3408	C4	P2209	D1	QR604	C2	QR2201	B4		
IC2003	D3	IC2013	D3	IC3451	C5	Q603	C1	QR605	C2	QR2202	B4		
IC2003	D5	IC2015	C1	IC3452	B4	Q608	C2	QR2001	C3	QR2203	B4		
IC2004	C2	IC2201	D4	IC3453	C4	Q611	C1	QR2002	D3	QR2204	B4		
IC2005	C3	IC2202	C5	IC3501	C1	Q2007	C4	QR2004	D3	QR3402	C4		
IC2007	C2	IC2204	D4	IC3502	A1	Q2008	D2	QR2005	D4	QR3404	C5		
IC2008	D3	IC2206	B3	IC3503	B1	Q2012	C4	QR2006	D4	TG9037	A4		
IC2009	D2	IC3004	B3	IC3504	B1	Q2013	C4	QR2010	D4	TG9039	D4		
IC2001	C3	IC2010	C2	IC3201	A4	Q3503	B1	QR2011	D4	TP2204	D4		

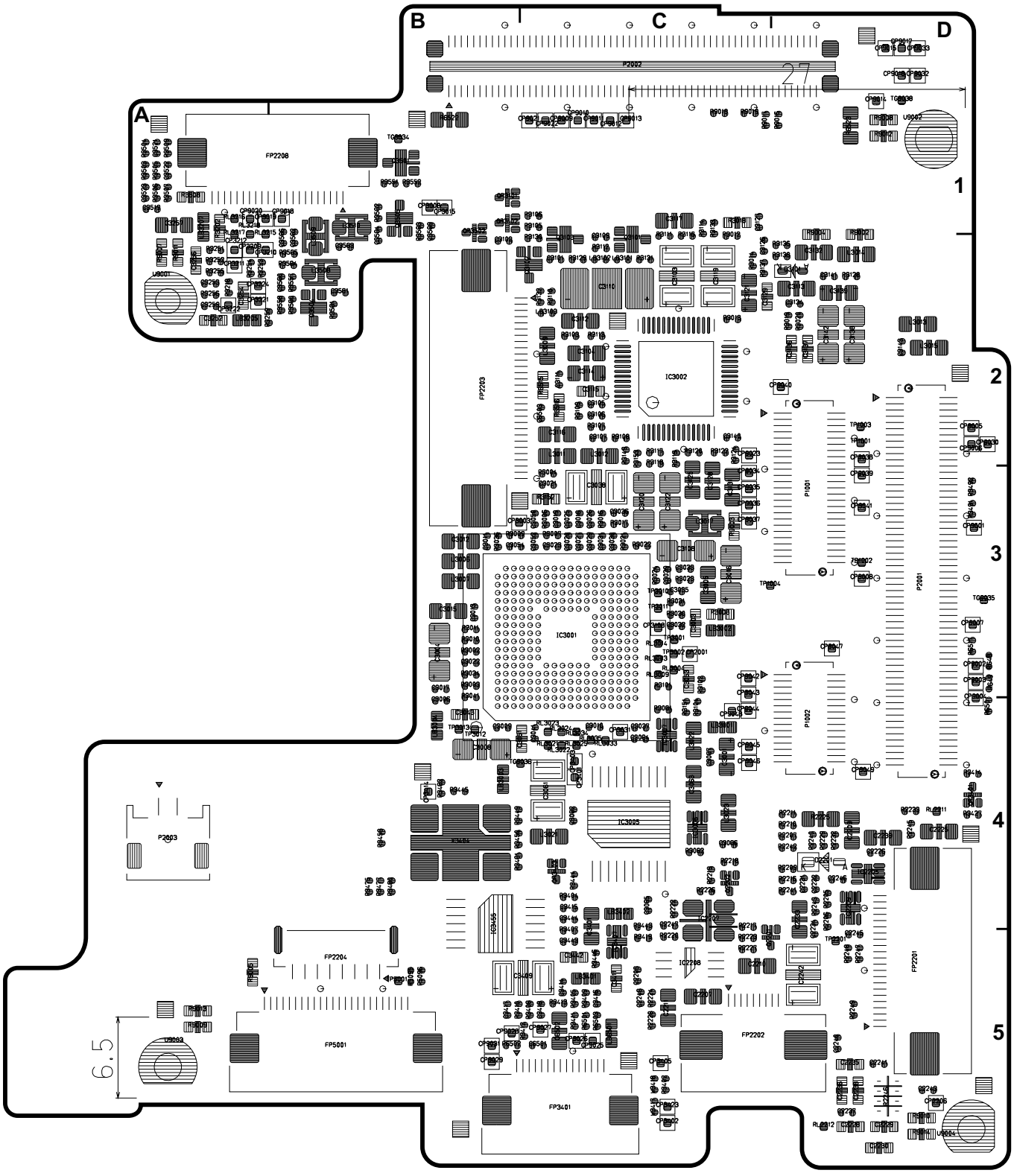


(FOIL SIDE)

VTR C.B.A. (VEP03G21A)

COMPONENT SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2205	D4	IC3455	B4	Q3103	C2	TG9034	B1	TP3010	C3
IC2207	C4	IP5001	B5	Q3501	B1	TG9035	D3	TP3011	C3
IC2208	C5	P1001	D3	Q3504	B2	TG9038	D1	TP3012	B4
IC2209	D4	P1002	D4	Q3506	B1	TP1001	D2	TP3013	B4
IC3001	C3	P2001	D3	QR3101	B1	TP1002	D3		
IC3002	C2	P2002	C1	QR3102	B1	TP1003	D2		
IC3005	C4	P2003	A4	QR3401	D4	TP1004	C3		
IC3006	C4	Q2201	C5	QR3403	C4	TP2201	D5		
IC3007	C4	Q2202	C4	QR3502	B1	TP3001	C3		
IC3407	C5	Q3102	C2	TG3036	B4	TP3002	C3		

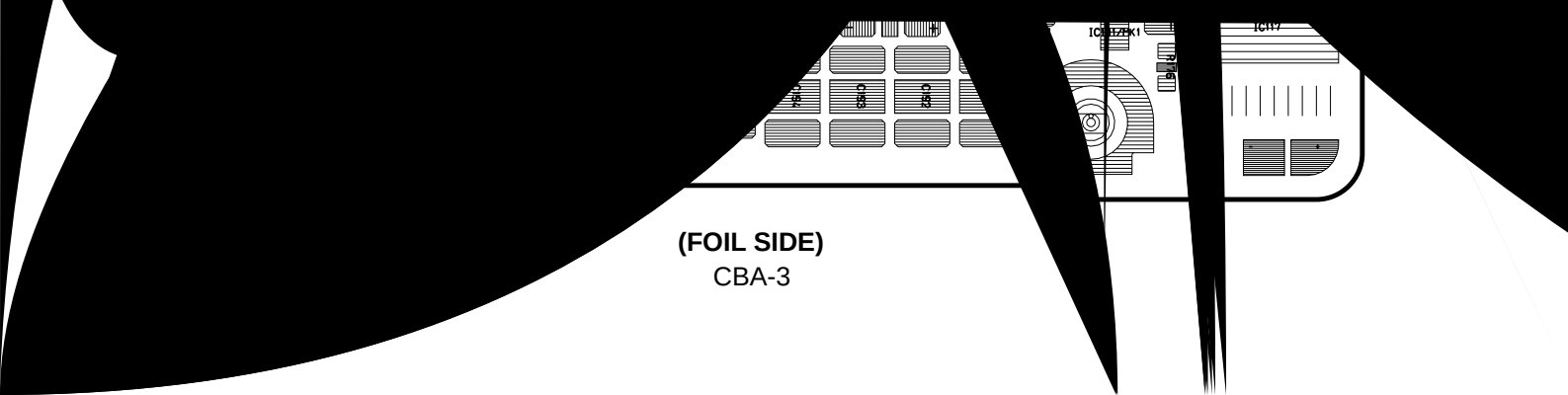


(COMPONENT SIDE)

CAM

FOIL SIDE

REF	
IC1	
IC2	
IC4	
IC5	
IC101	

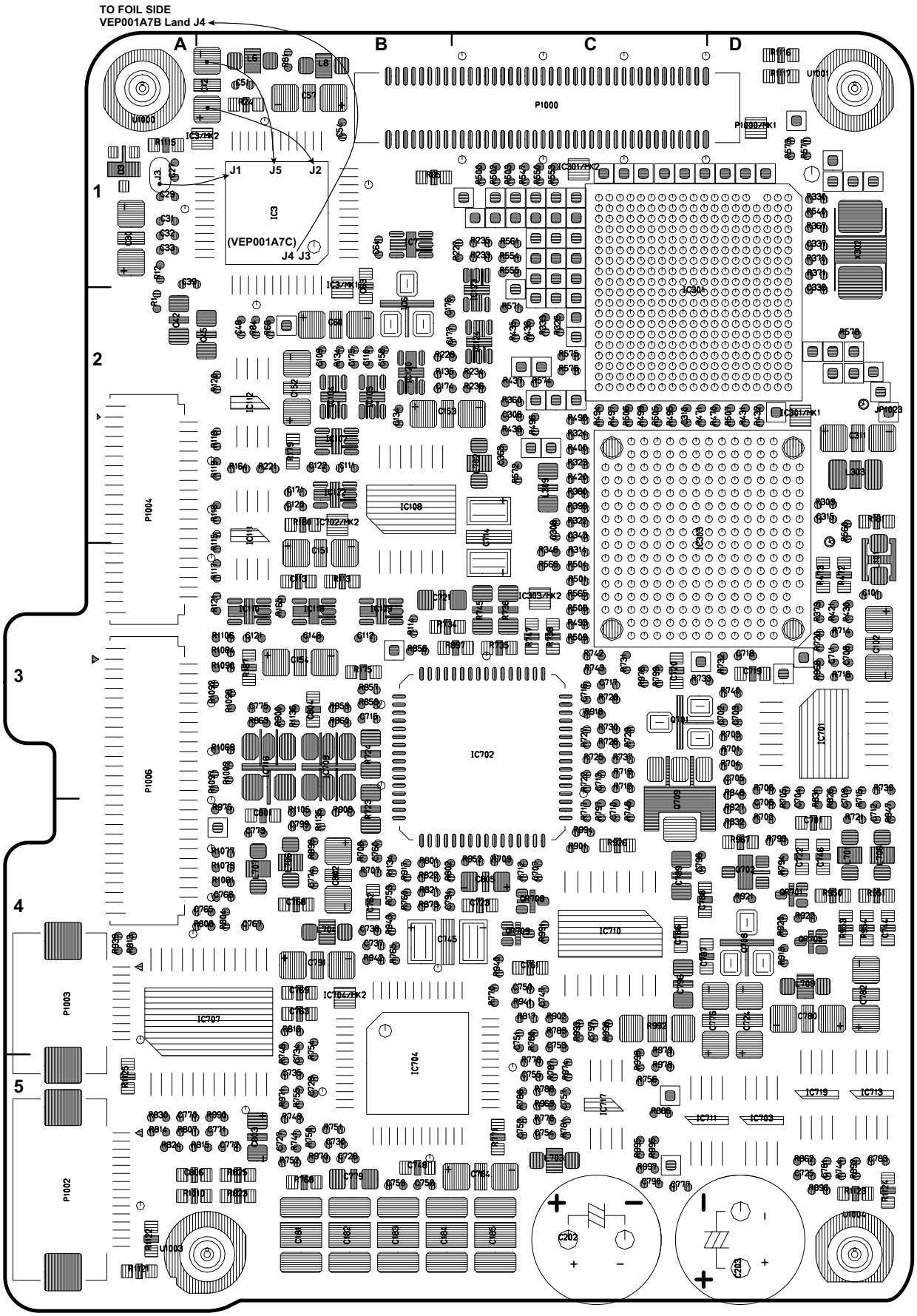


(FOIL SIDE)
CBA-3

CAMERA C.B.A. (VEP23571A)

COMPONENT SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC3	B1	IC107	B2	IC112	B2	IC124	C2	IC703	D5	IC711	C5	P1000	C1	Q701	C3	QR705	D4
IC6	B2	IC108	B2	IC118	B3	IC301	C2	IC704	B5	IC713	D5	P1002	A5	Q702	D4	QR708	C4
IC7	B1	IC109	B3	IC120	B2	IC303	C2	IC707	B4	IC716	B3	P1003	A4	Q708	D4	QR709	C4
IC104	B2	IC110	B3	IC122	B2	IC701	D3	IC709	B3	IC717	C5	P1004	A2	Q709	C4		
IC105	B2	IC111	B2	IC123	C2	IC702	C3	IC710	C4	IC719	D5	P1006	A3	QR701	D4		



(COMPONENT SIDE)

POWER C.B.A. (VEP01914A)

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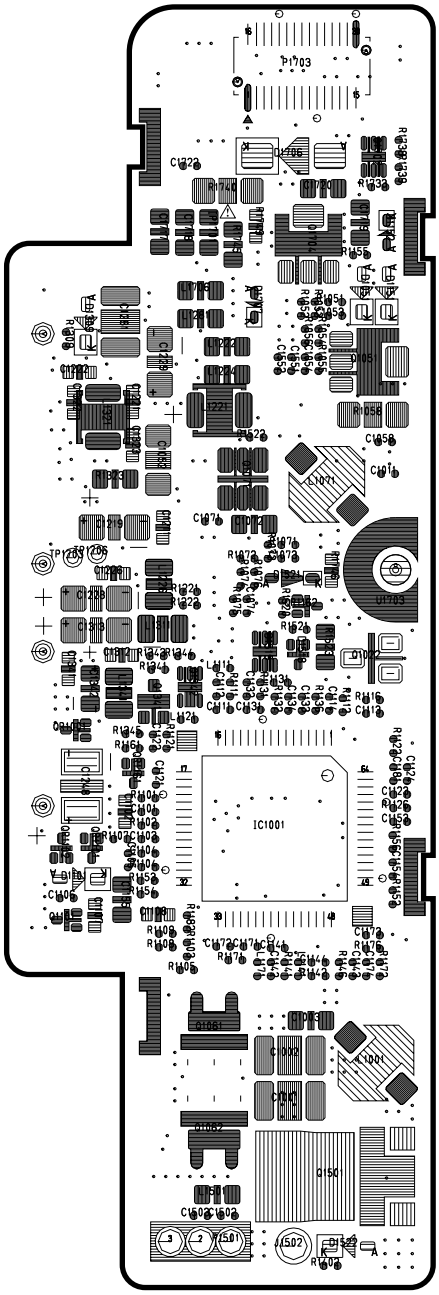
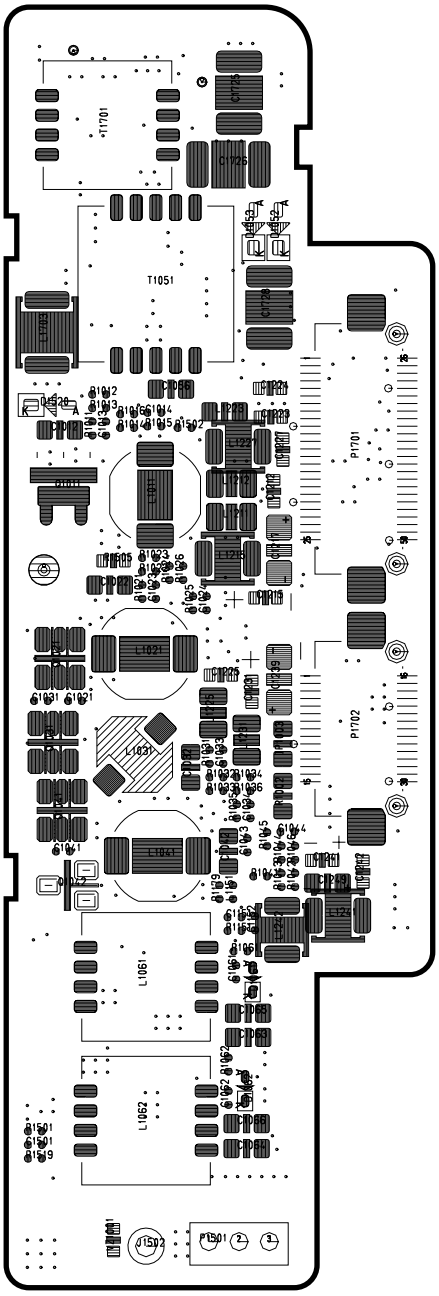
⚠ 警 告 ⚠ 印の部品は安全上重要な部品です。
交換するときは、安全及び性能維持のため必ず指定の部品をご使用ください。



(FOIL SIDE)

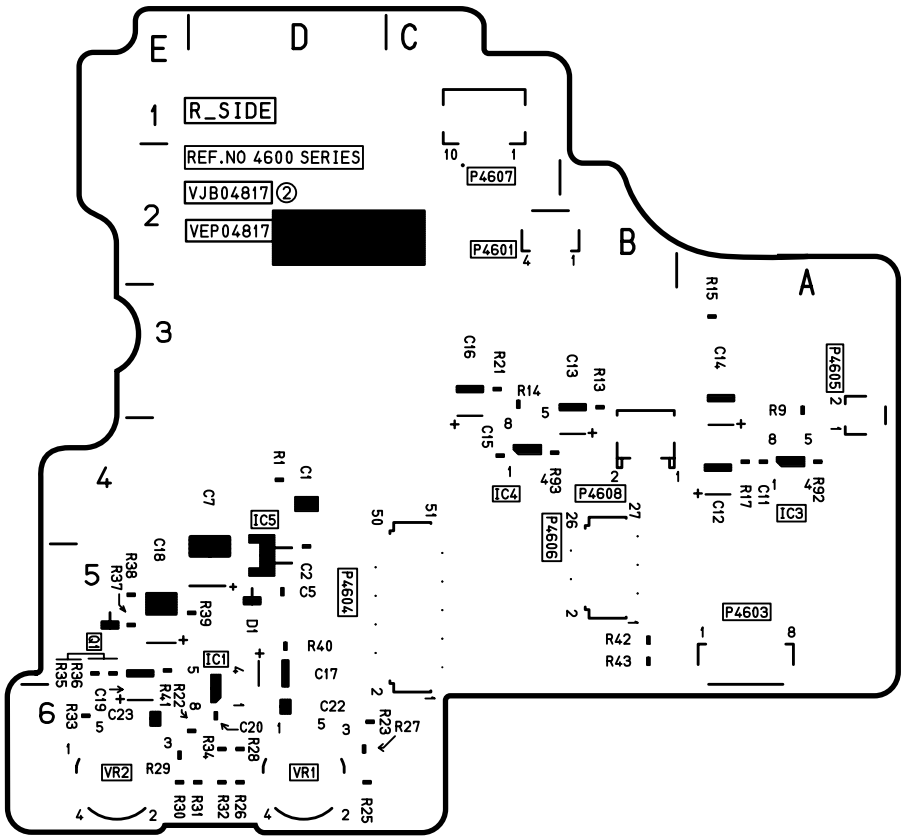


(COMPONENT SIDE)

R SIDE C.B.A. (VEP04817A)

FOIL SIDE

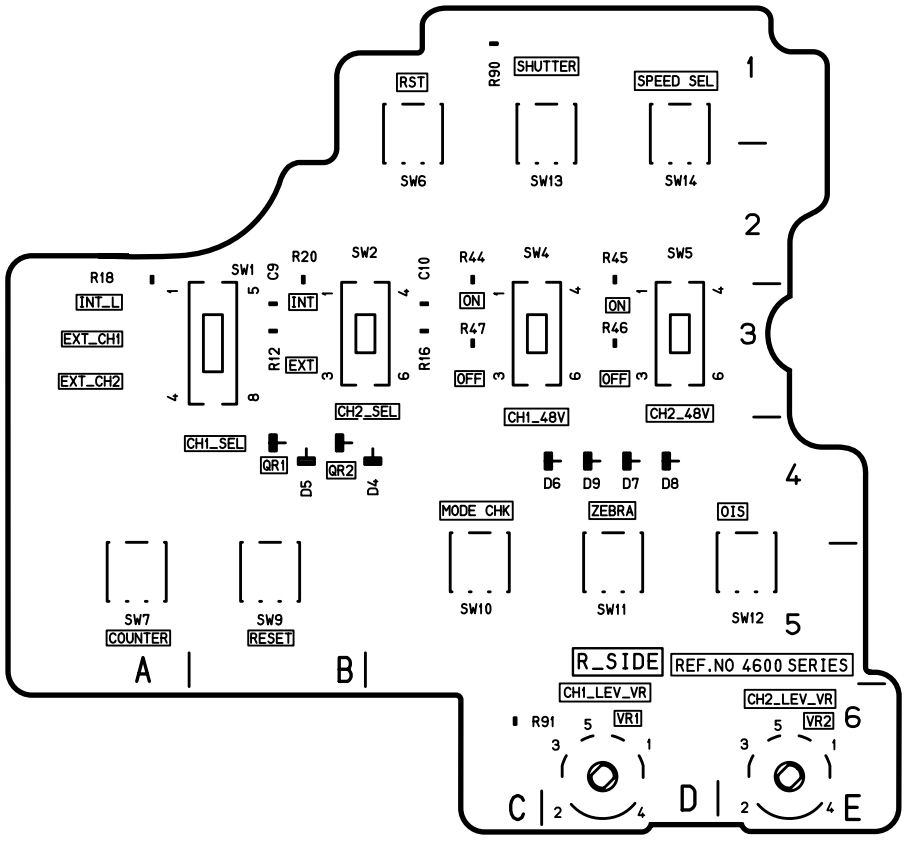
REF	LOC
IC1	D6
IC3	A4
IC4	C4
IC5	D5
P4601	C2
P4603	A5
P4604	C5
P4605	A4
P4606	B5
P4607	C1
P4608	B4
Q1	E5
VR1	D6
VR2	E6



(FOIL SIDE)

COMPONENT SIDE

REF	LOC
QR1	B4
QR2	B4
VR1	D6
VR2	E6



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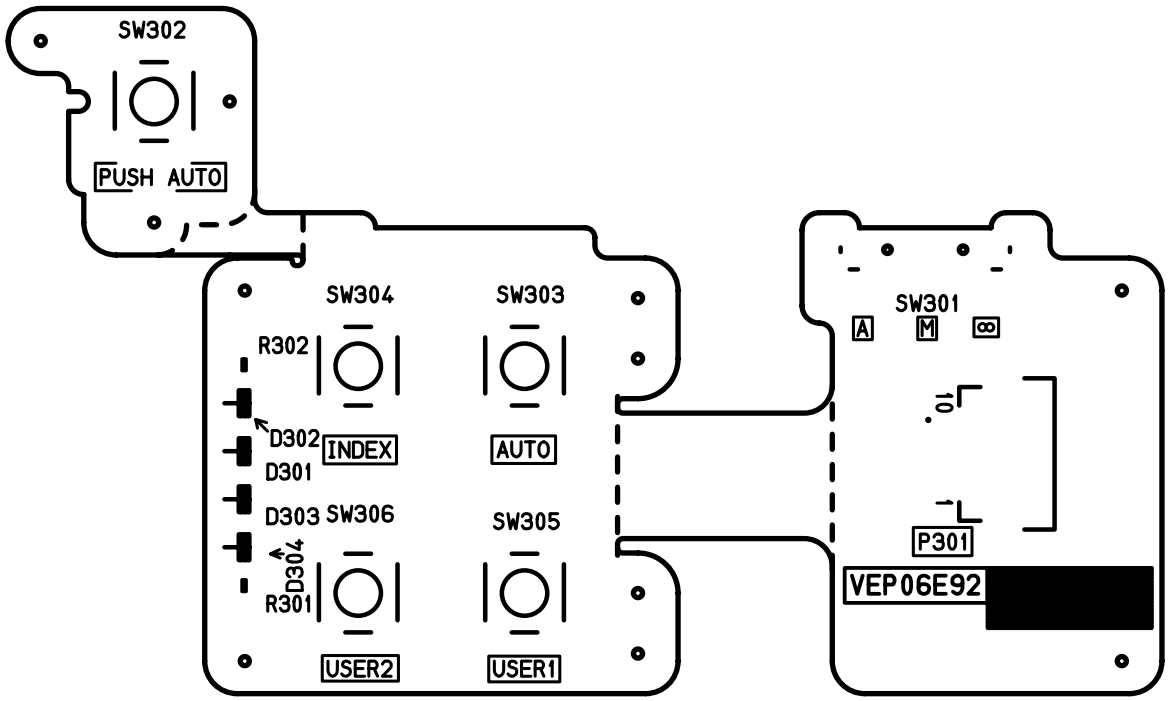
CAMERA OP1 FLEX C.B.A. (VEP06E92A)



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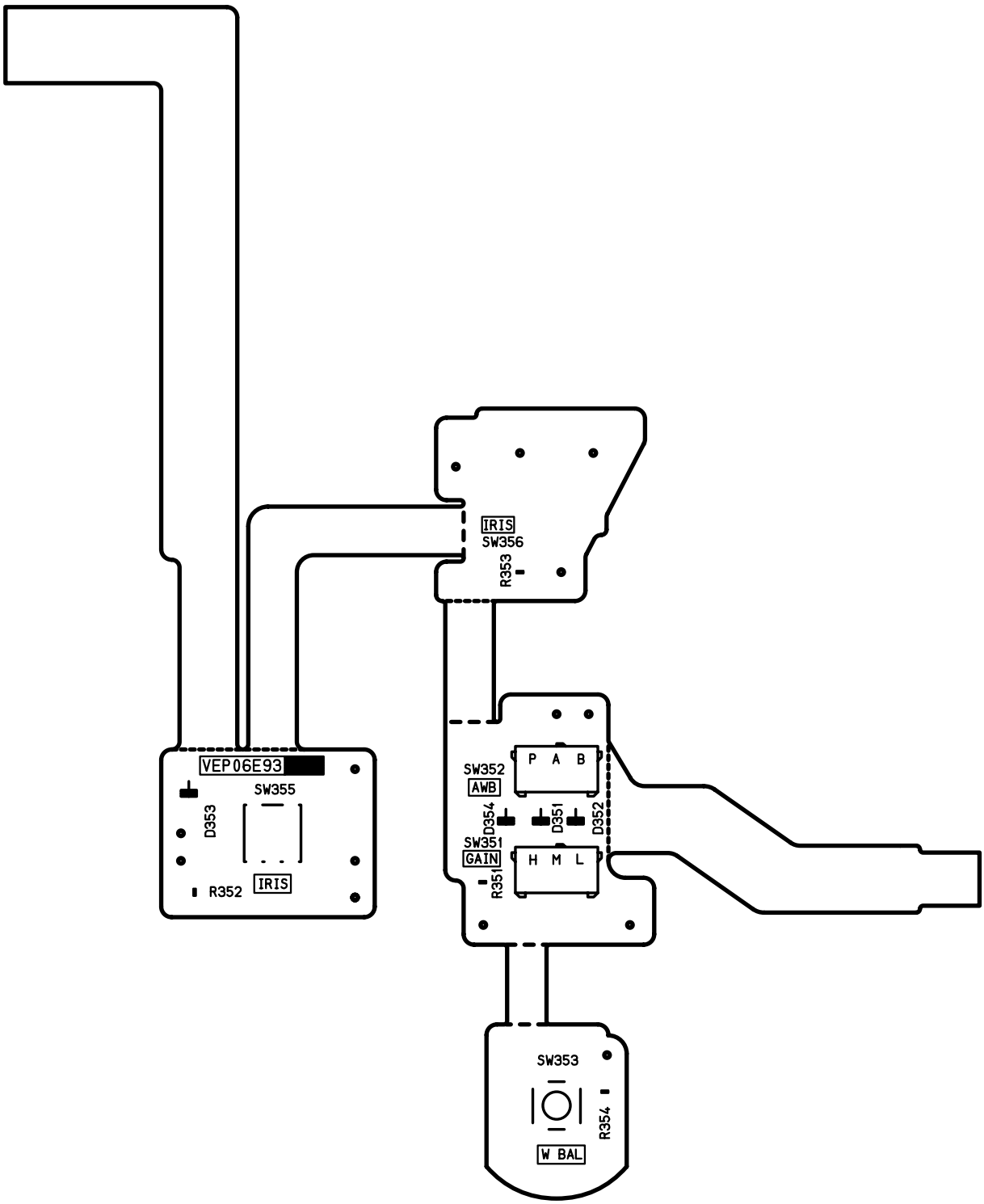

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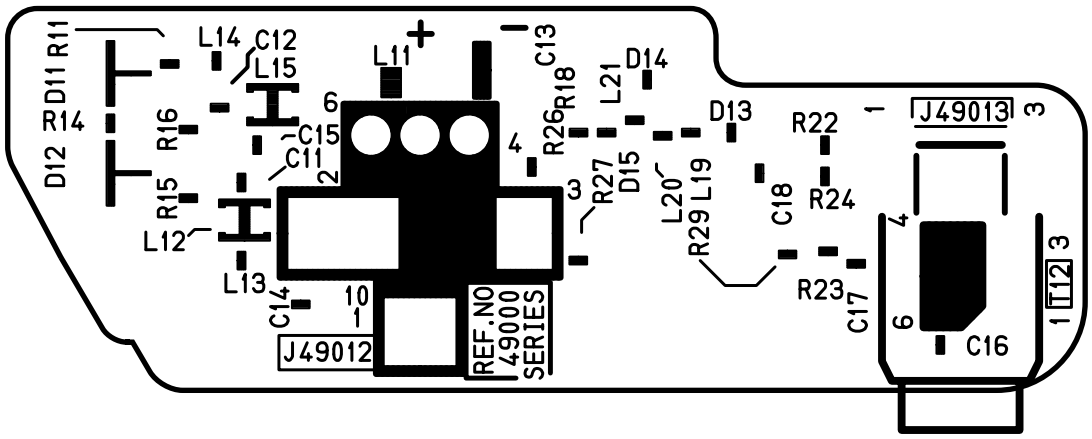
REAR JACK C.B.A. (VEP04819A)



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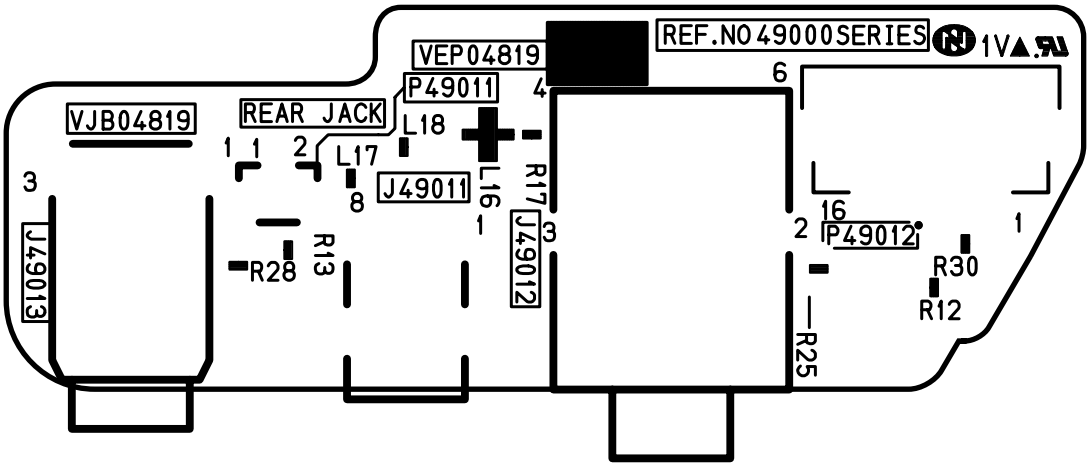

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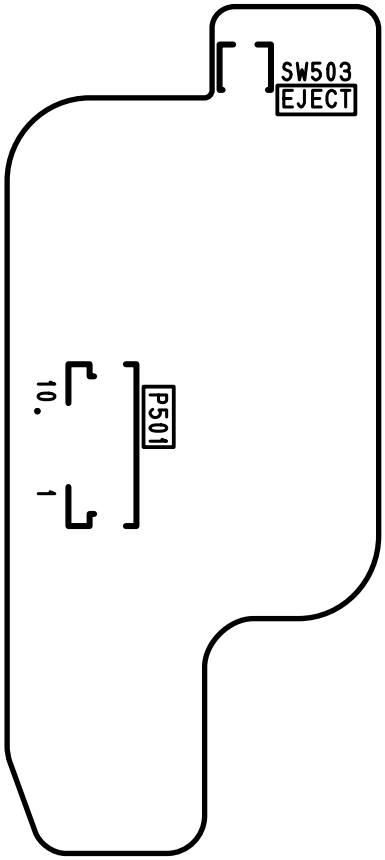
POWER SW C.B.A. (VEP06E96A)



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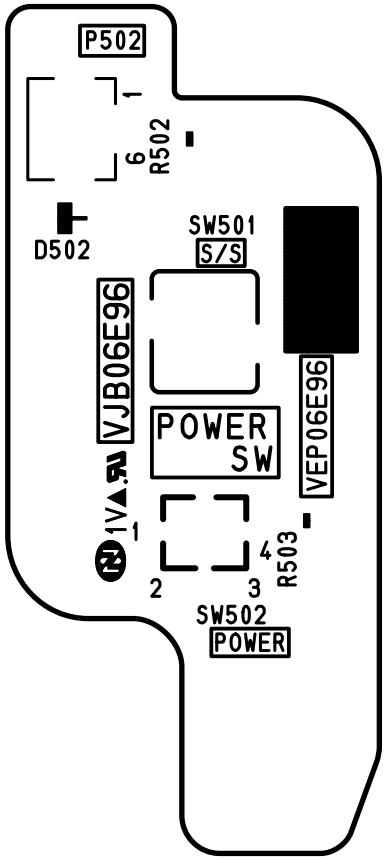

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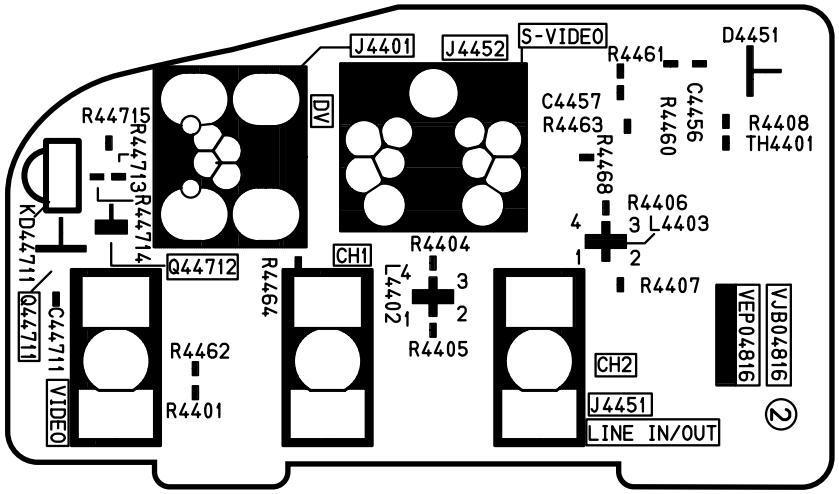
SIDE JACK C.B.A. (VEP04816A)



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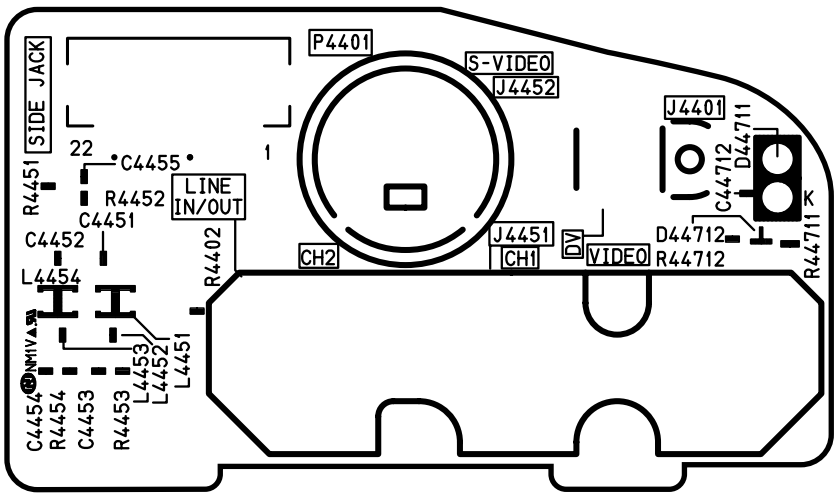

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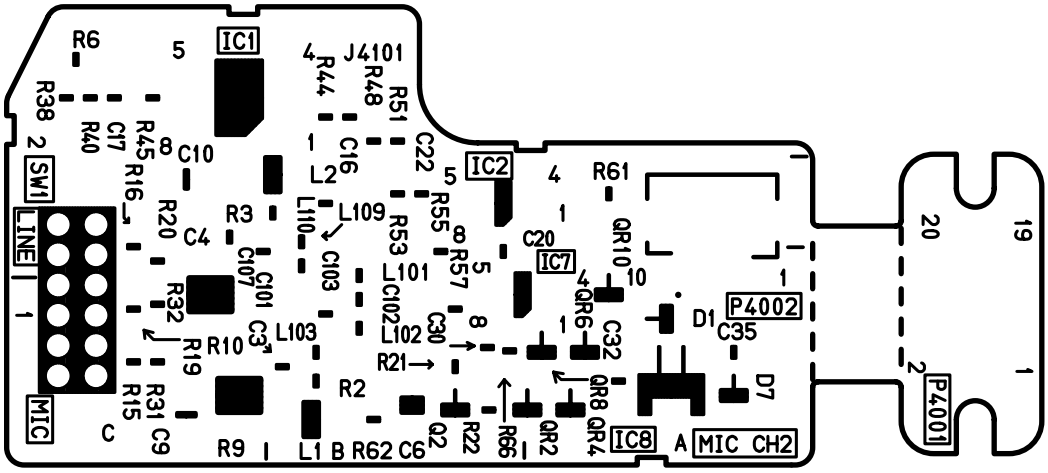
MIC CH2 C.B.A. (VEP04815A)



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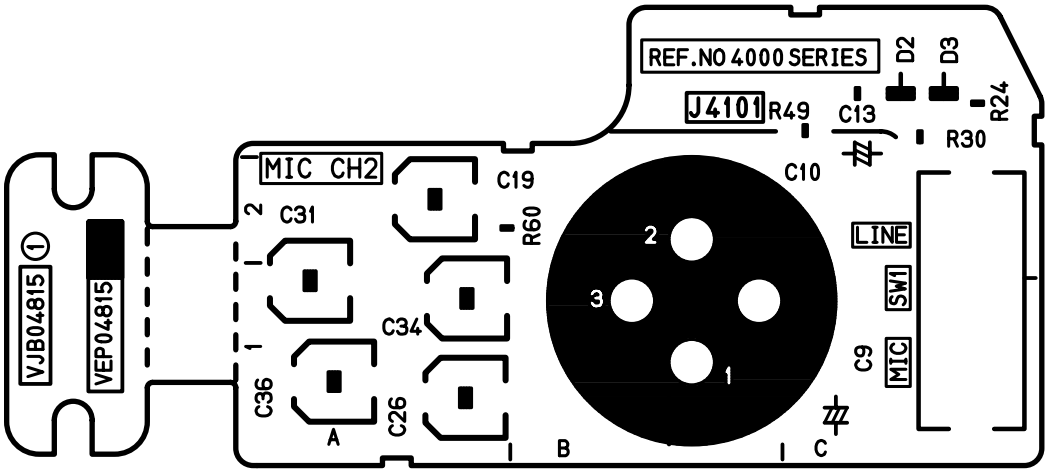

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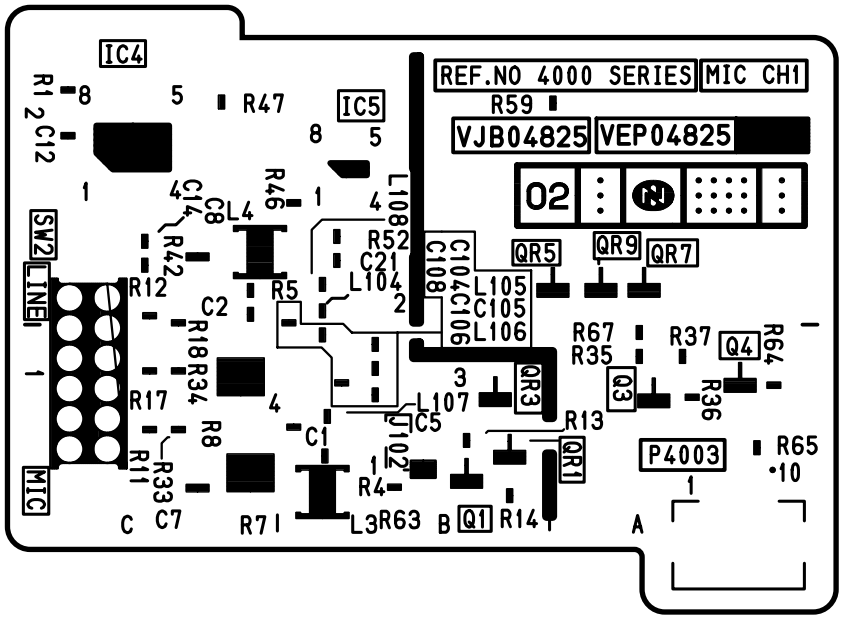
MIC CH1 C.B.A. (VEP04825A)



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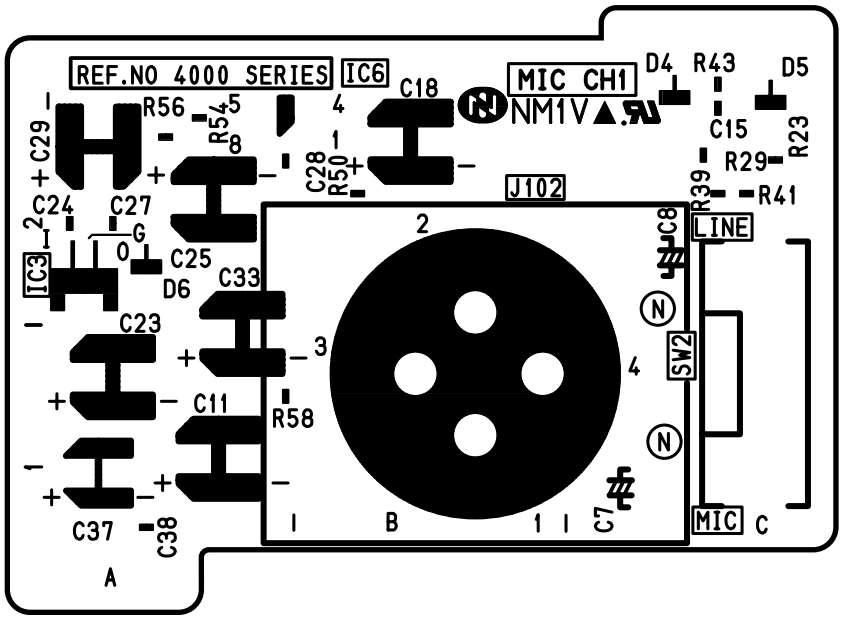

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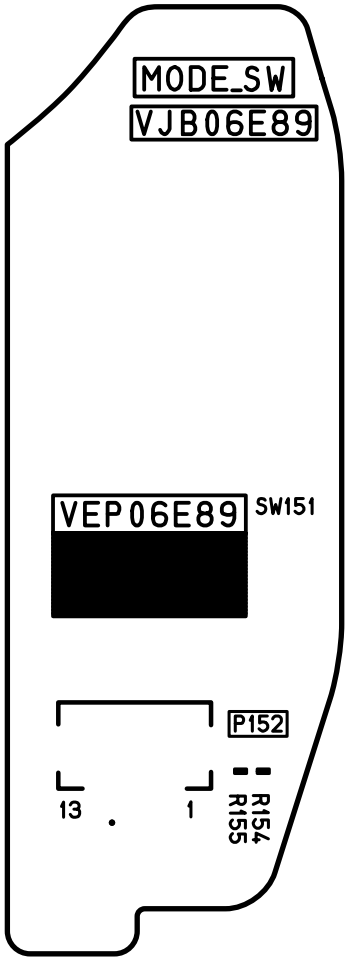
MODE SW C.B.A. (VEP06E89A)



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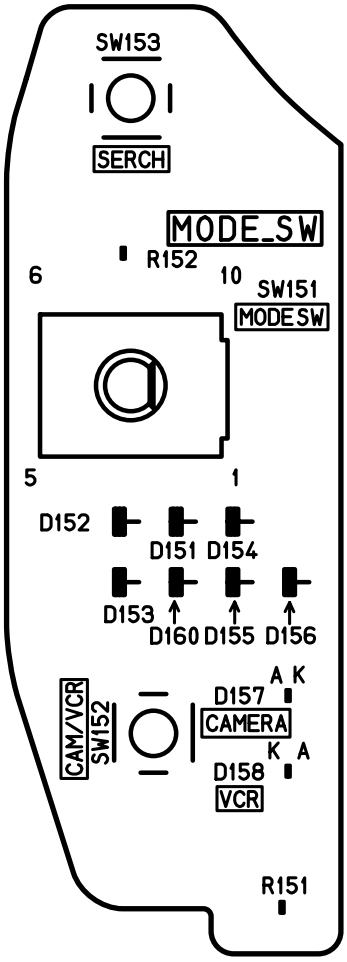

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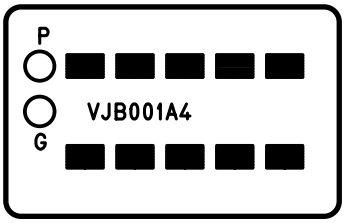
VTR SUB C.B.A. (VEP001A4A)



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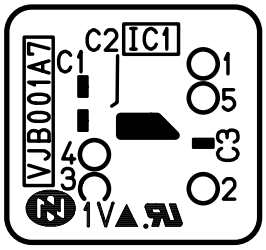
CAMERA SUB 1/2/3 C.B.A. (VEP001A7A/B/C)



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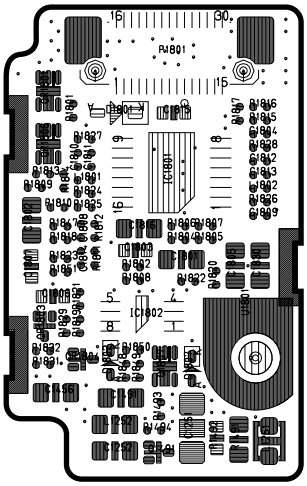
POWER SUB C.B.A. (VEP001A6A)

(COMPONENT SIDE)

POWER 2 C.B.A. (VEP01922A)



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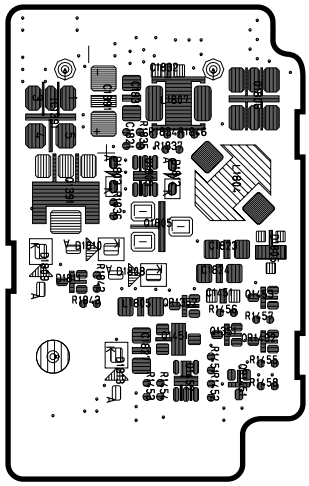

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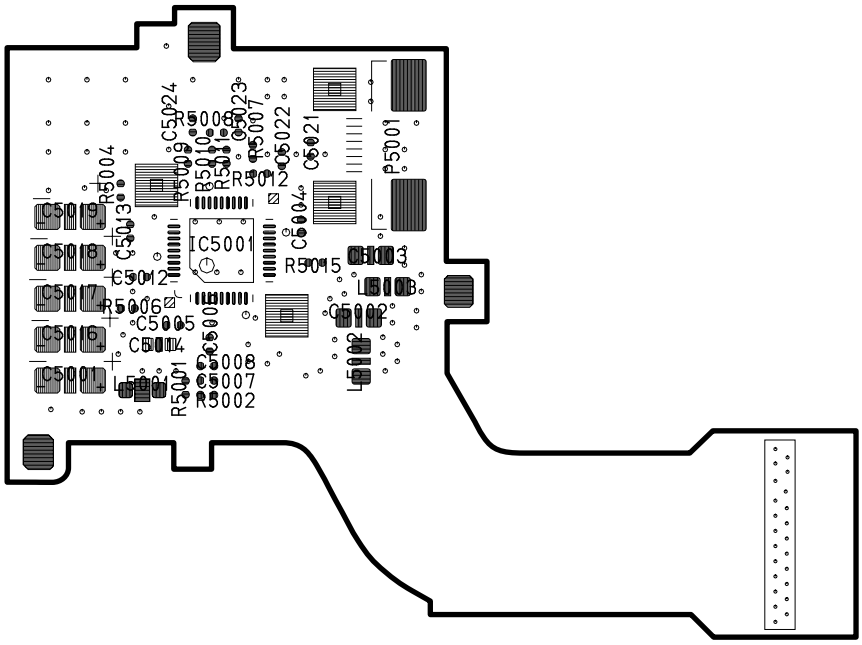
HR AMP C.B.A. (VEP05395A)



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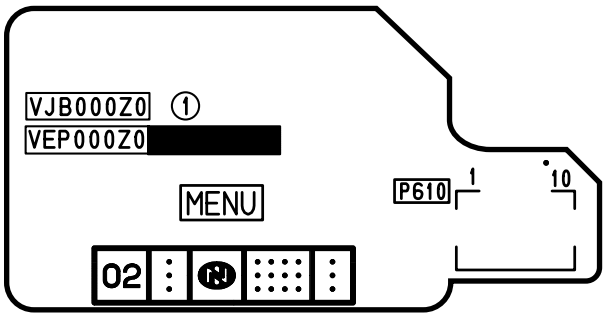
MENU C.B.A. (VEP000Z0A)



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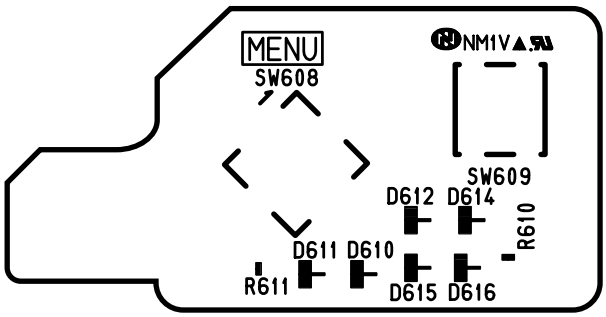

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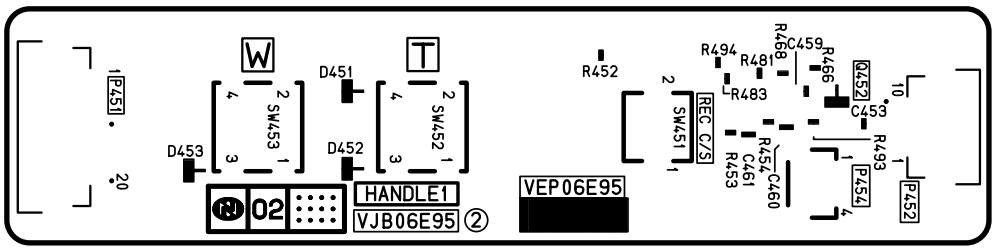
HANDLE 1 C.B.A. (VEP06E95A)



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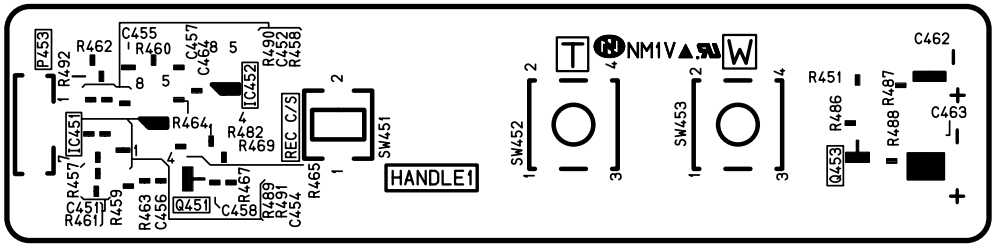

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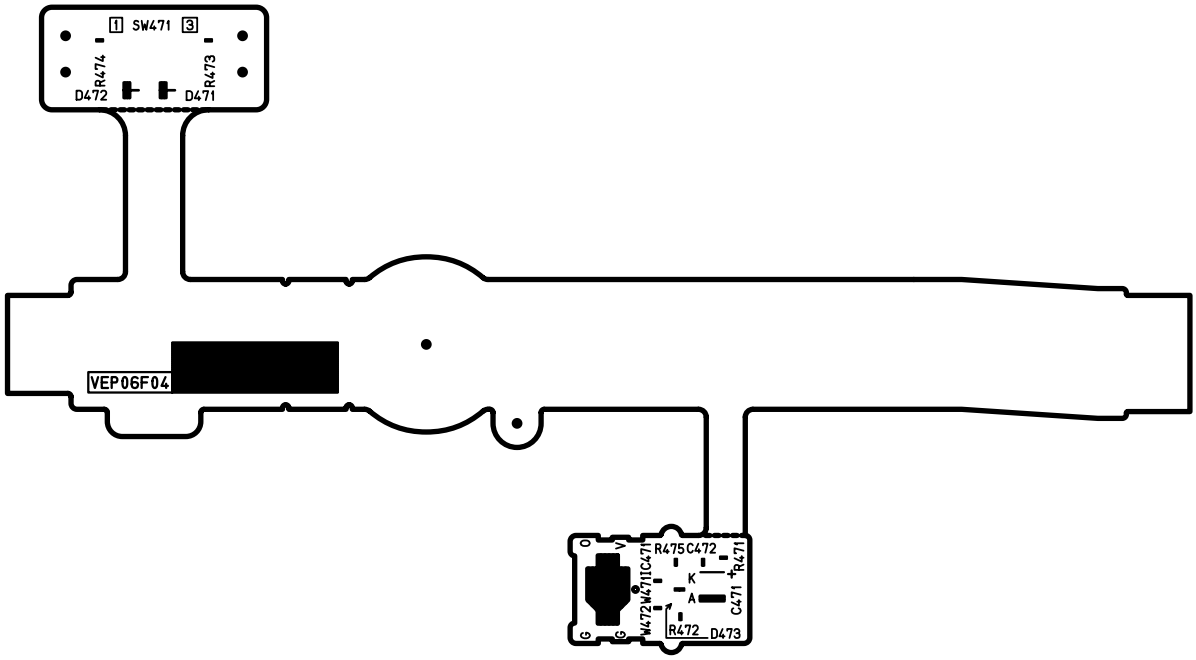
HANDLE 2 FLEX C.B.A. (VEP06F04A)



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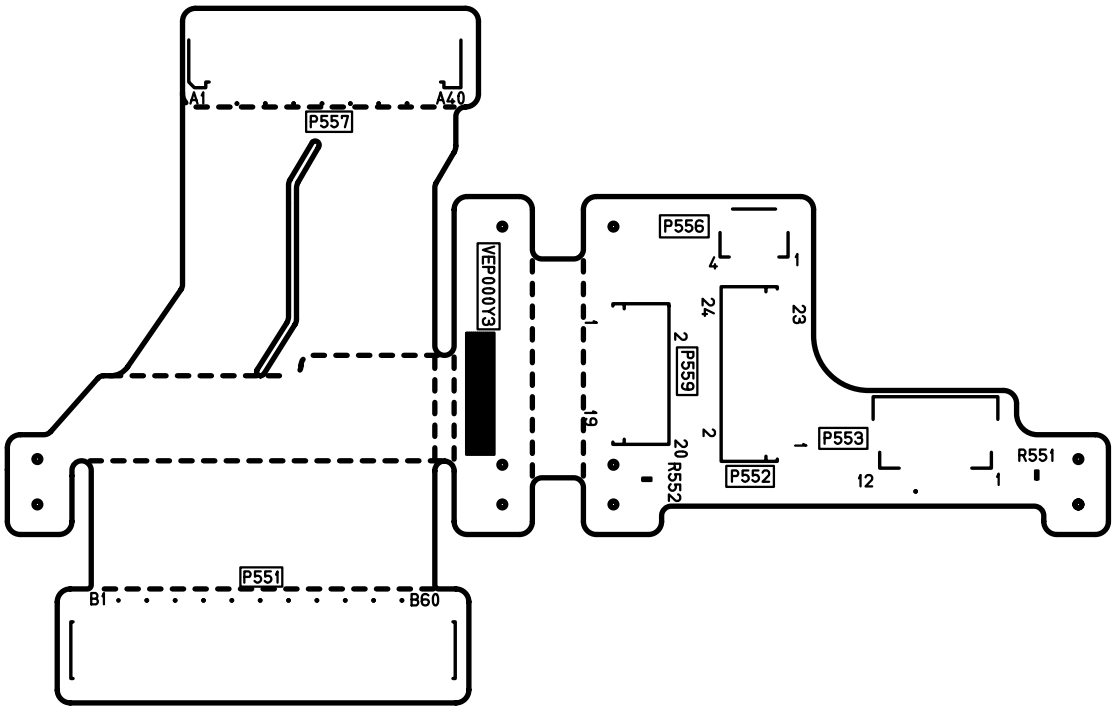
VC CONNECT C.B.A. (VEP000Y3A)



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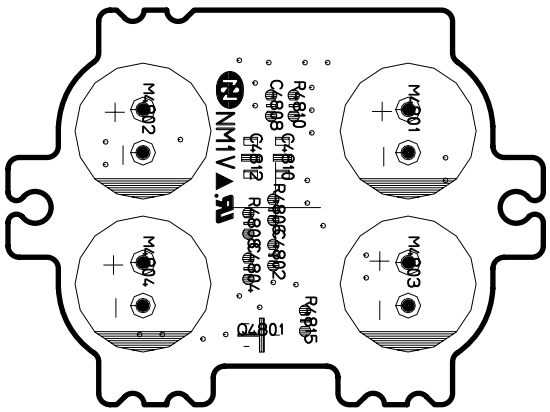
MIC C.B.A. (VEP04828A)



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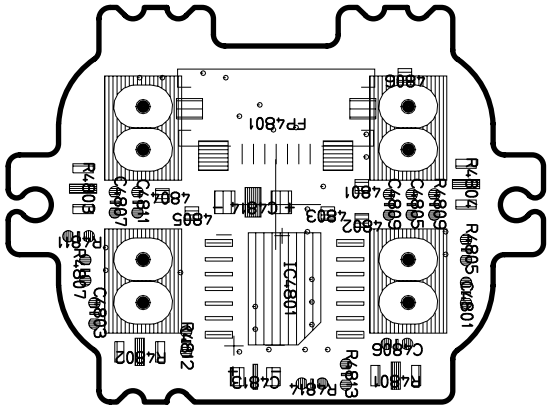

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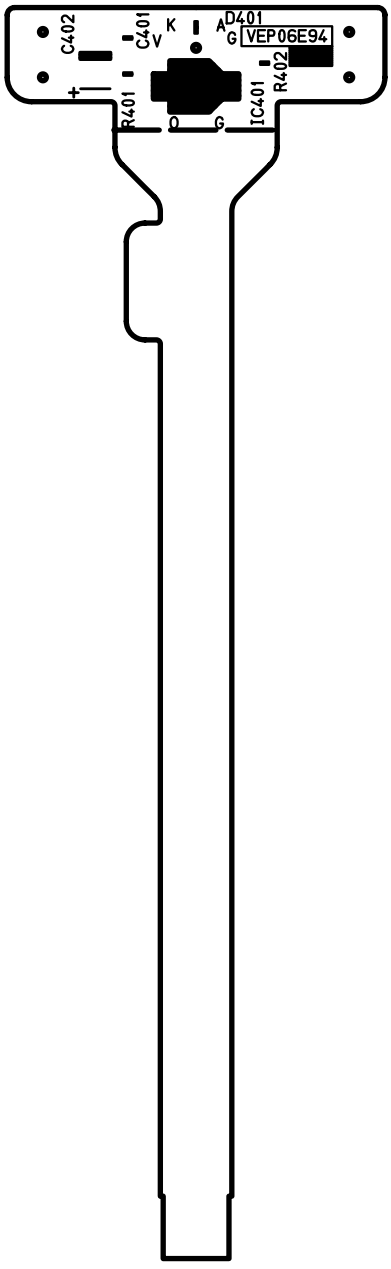
F TALLY FLEX C.B.A. (VEP06E94A)



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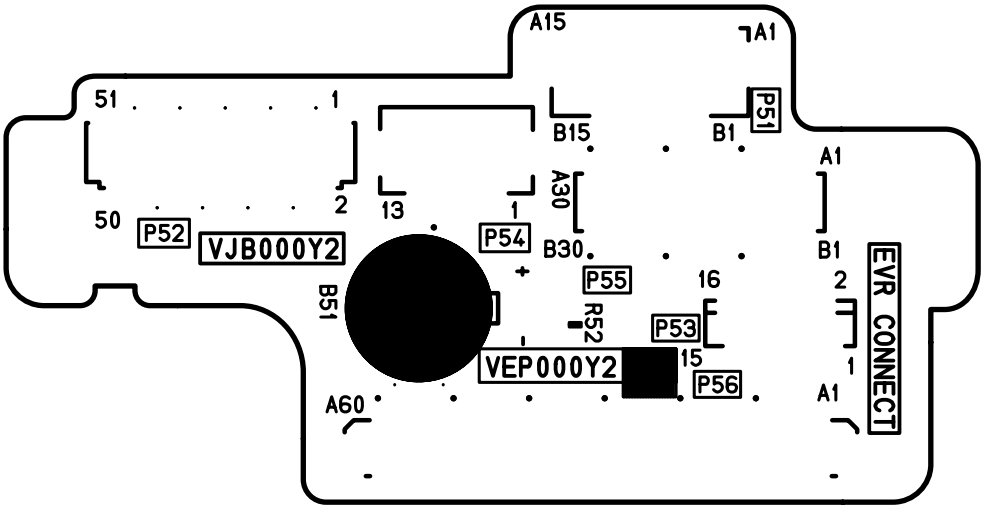
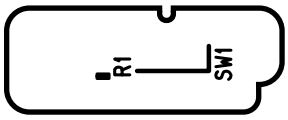
EVR CONNECT C.B.A. (VEP000Y2A)



(COMPONENT SIDE)

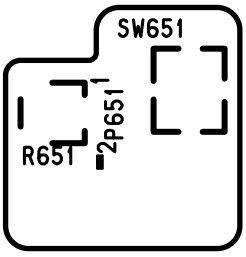
LCD OPEN C.B.A. (VEP000Y4A)

(FOIL SIDE)



(COMPONENT SIDE)

EJECT C.B.A. (VEP000Y7A)



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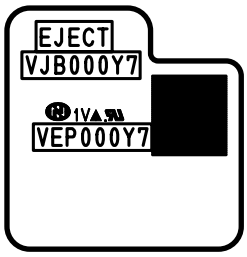

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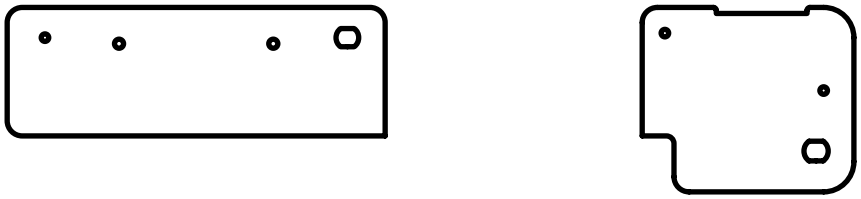
ZOOM SW FLEX C.B.A. (VEP06E90A)



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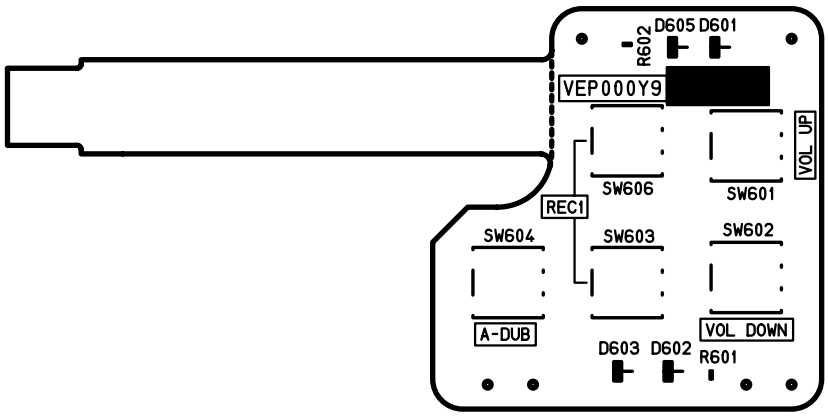
TOP OP C.B.A. (VEP000Y9A)



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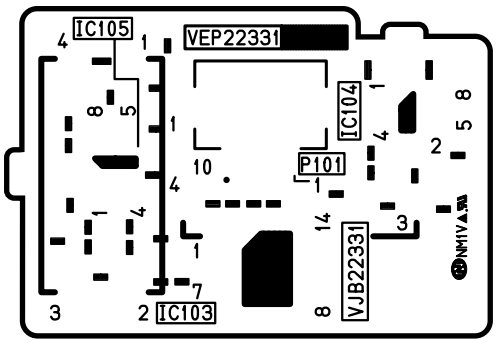
GYRO C.B.A. (VEP22331A)



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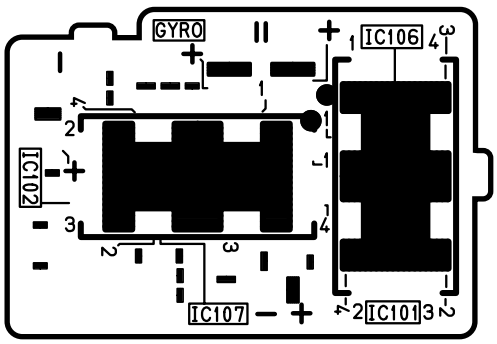

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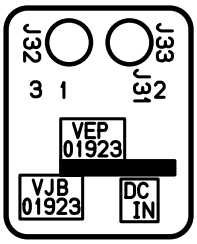
DC IN C.B.A. (VEP01923A)



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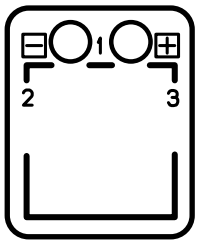
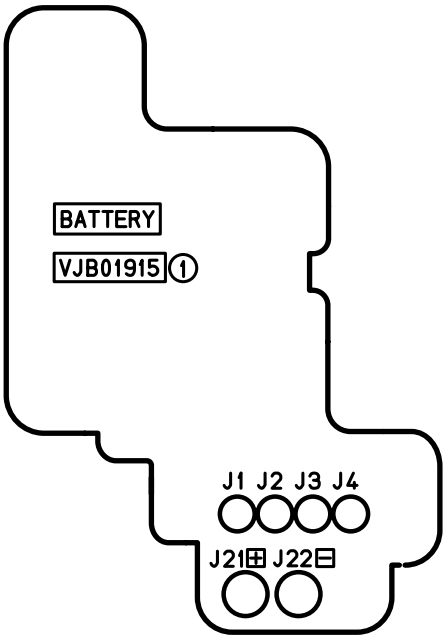


(COMPONENT SIDE)

BATTERY C.B.A. (VEP01915A)

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

⚠ 警 告 ⚠ 印の部品は安全上重要な部品です。
交換するときは、安全及び性能維持のため必ず指定の部品をご使用ください。



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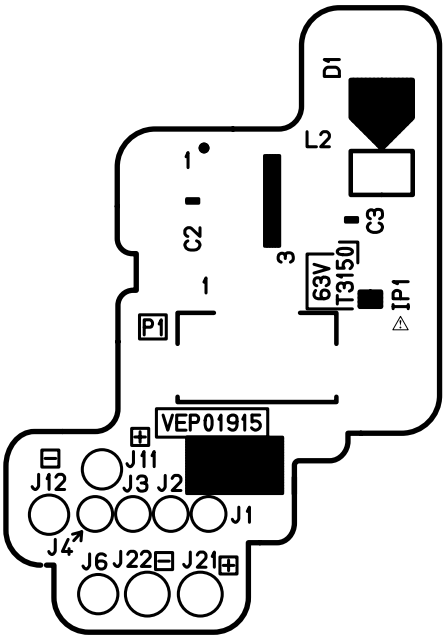
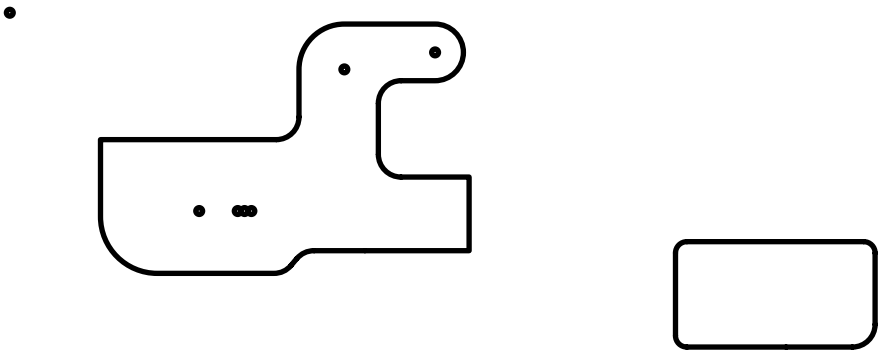


(COMPONENT SIDE)

REAR JACK CONNECT C.B.A. (VEP000Y6A)



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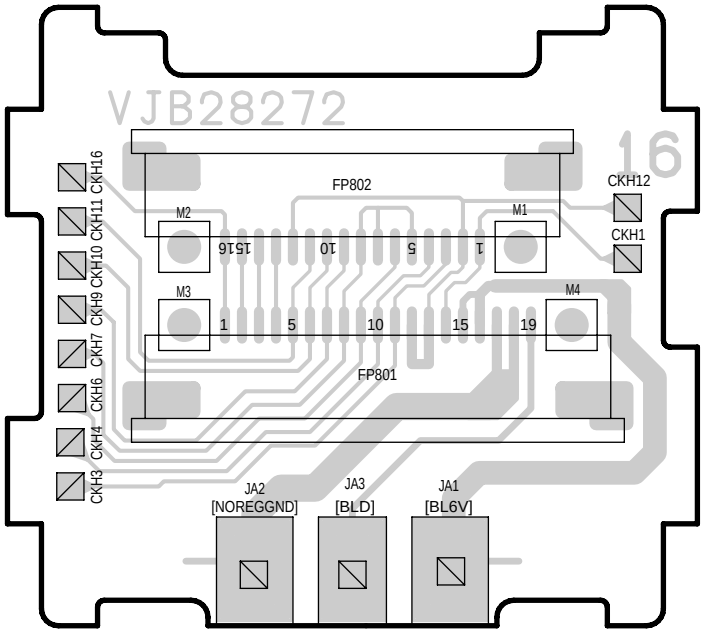
EVF A C.B.A. (VEP28272B)



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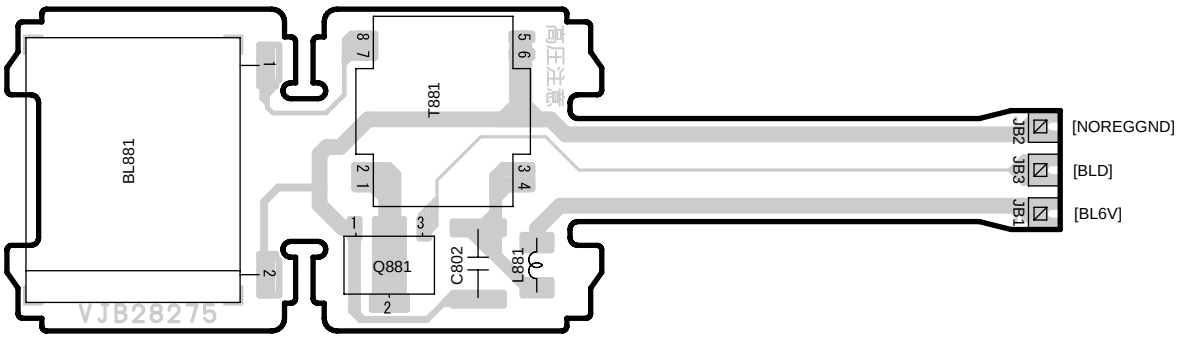
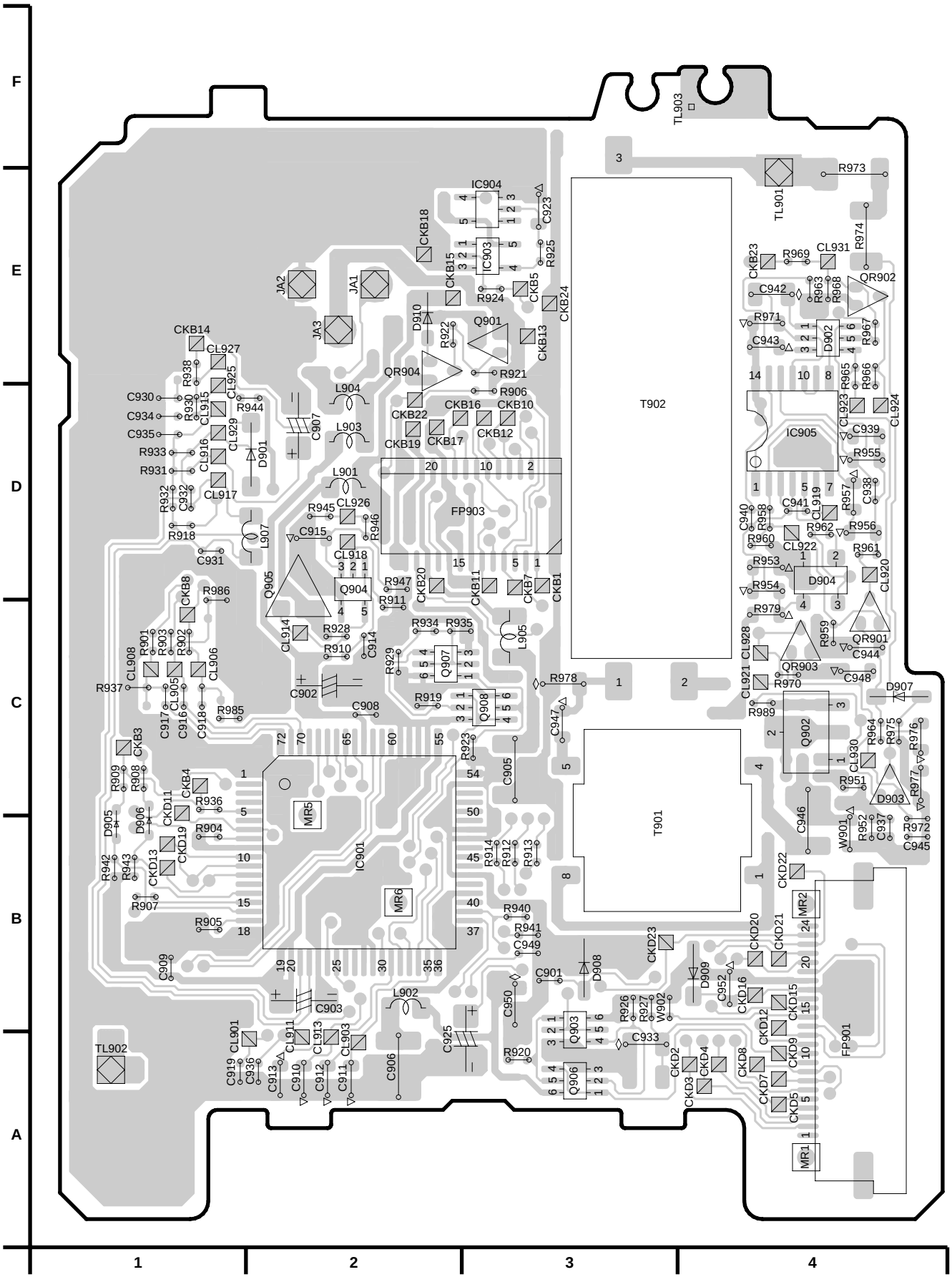
EVF B C.B.A. (VEP28275B)



(COMPONENT SIDE)

MONITOR C.B.A. (VEP26257A)



(COMPONENT SIDE)

MONITOR C.B.A. (VEP26257A)

Monitor C.B.A.											
Integrated Circuit		CL921	C-4	L907	D-2	C939	D-4	R924	E-3	R962	D-4
IC901	B-2	CL922	D-4	**Transformer**		C940	D-4	R925	E-3	R963	E-4
IC903	E-3	CL923	D-4	T901	B-3	C941	D-4	R926	B-3	R964	C-4
IC904	E-3	CL924	D-4	T902	D-3	C942	E-4	R927	B-3	R965	E-4
IC905	D-4	CL925	D-1	**Capacitor**		C943	E-4	R928	C-2	R966	E-4
Transistor		CL926	D-2	C901	B-3	C944	C-4	R929	C-2	R967	E-4
Q901	E-3	CL927	E-1	C902	C-2	C945	B-4	R930	D-1	R968	E-4
Q902	C-4	CL928	C-4	C903	B-2	C946	B-4	R931	D-1	R969	E-4
Q903	A-3	CL929	D-1	C905	C-3	C947	C-3	R932	D-1	R970	C-4
Q904	D-2	CL930	C-4	C906	A-2	C948	C-4	R933	D-1	R971	E-4
Q905	D-2	CL931	E-4	C907	D-2	C949	B-3	R934	C-2	R972	B-4
Q906	A-3	TL901	E-4	C908	C-2	C950	B-3	R935	C-2	R973	E-4
Q907	C-2	TL902	A-1	C909	B-1	C952	B-4	R936	C-1	R974	E-4
Q908	C-3	TL903	F-4	C910	A-2	**Resistor**		R937	C-1	R975	C-4
Transistor & Resistor		**Connector**		C911	A-2	R901	C-1	R938	E-1	R976	C-4
QR901	C-4	FP901	A-4	C912	A-2	R902	C-1	R940	B-3	R977	C-4
QR902	E-4	FP903	D-3	C913	A-2	R903	C-1	R941	B-3	R978	C-3
QR903	C-4	**Diode**		C914	C-2	R904	B-1	R942	B-1	R979	C-4
QR904	E-2	D901	D-2	C915	D-2	R905	B-1	R943	B-1	R985	C-1
Test Point		D902	E-4	C916	C-1	R906	D-3	R944	D-2	R986	C-1
CL901	A-2	D903	C-4	C917	C-1	R907	B-1	R945	D-2	R989	C-4
CL903	A-2	D904	D-4	C918	C-1	R908	C-1	R946	D-2	**Wire**	
CL905	C-1	D905	B-1	C919	A-1	R909	C-1	R947	D-2	W901	B-4
CL906	C-1	D906	B-1	C923	E-3	R910	C-2	R951	C-4	W902	B-3
CL908	C-1	D907	C-4	C925	A-2	R911	C-2	R952	B-4	**Jumper**	
CL911	A-2	D908	B-3	C930	D-1	R912	B-3	R953	D-4	JA1	E-2
CL913	A-2	D909	B-4	C931	D-1	R913	B-3	R954	D-4	JA2	E-2
CL914	C-2	D910	E-2	C932	D-1	R914	B-3	R955	D-4	JA3	E-2
CL915	D-1	**Coil**		C933	A-3	R918	D-1	R956	D-4		
CL916	D-1	L901	D-2	C934	D-1	R919	C-2	R957	D-4		
CL917	D-1	L902	B-2	C935	D-1	R920	A-3	R958	D-4		
CL918	D-2	L903	D-2	C936	A-2	R921	E-3	R959	C-4		
CL919	D-4	L904	D-2	C937	B-4	R922	E-2	R960	D-4		
CL920	D-4	L905	C-3	C938	D-4	R923	C-3	R961	D-4		

ADDRESS INFORMATION

SECTION 8

EXPLODED VIEWS
&
REPLACEMENT PARTS LIST

Note:

1. *Be sure to make your orders of replacement parts according to this list.
2. Unless otherwise specified, all resistors are in OHMS, K=1,000 OHMS, all capacitors are in MICROFARADS (μF), P=μμF.
3. The P.C. Board unit marked with "■" shown below the main assembled parts.
4. The parts marked with Ⓔ on the exploded view show the electric parts.
5. IMPORTANT SAFETY NOTICE
   Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
6. The marking (RTL) indicates the retention time is limited for this item.
   After the discontinuation of this assembly in production, it will no longer be available.
7. "(M)" in Remark column indicates needed in the periodical maintenance.

CONTENTS

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MECHANICAL CHASSIS ASSEMBLY (2) PRT-4
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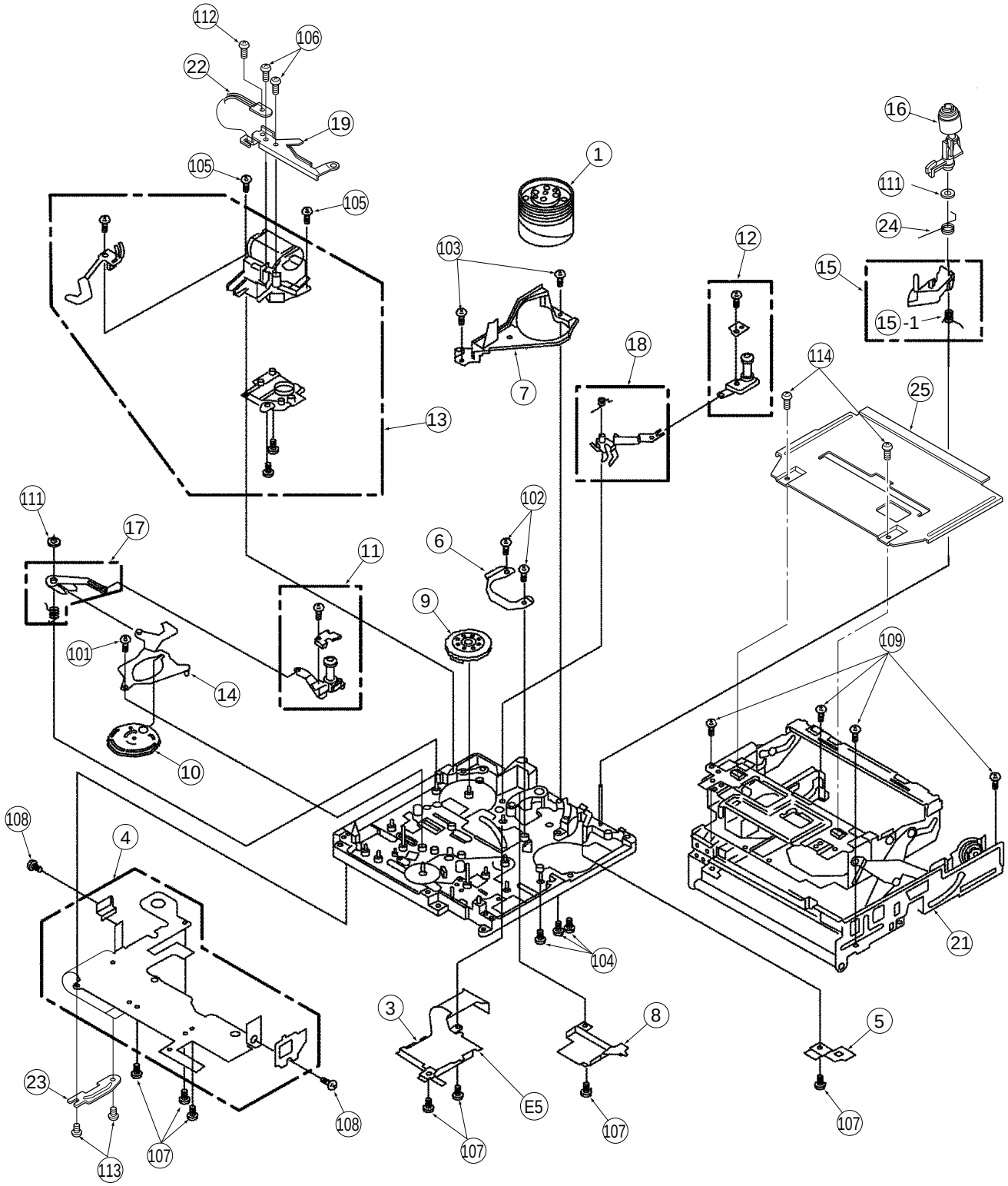
HANDLE & EVF PARTS ASSEMBLY PRT-10
LCD PARTS ASSEMBLY PRT-12
PACKING PARTS ASSEMBLY PRT-14
ELECTRICAL REPLACEMENT PARTS LIST PRT-16

SERVICING FIXTURES & TOOLS

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VFM3010EDS	DV ALIGNMENT TAPE (COLOR BAR)	1	
2	VFM3000EDS	DV ALIGNMENT TAPE (LINEARITY)	1	
3	VFK1217	TAPE END/BEG DET CASSETTE	1	
4	VFK1811	EVR ADJ. SOFTWARE	1	
5	VFK1308P	MEASURING BOARD	1	
6	VFK1309A	EVR CONNECTOR BOARD	1	
7	VFK1694	EVR EXTENDER BOARD	1	
8	VJA0941	DC CABLE	1	
9	VFK1317	30PIN FLAT CABLE	1	
10	VFK1809	72MM ATTACHMENT RING	1	
11	VFK1164TAR43	43MM ATTACHMENT RING	1	
12	VFK1164TCM01	COLLIMATOR SET	1	(INFINITY LENS)
13	VFK1341	CC FILTER (LB40)	1	
14	VFK1347	CC FILTER (LB120)	1	
15	VFK1345	CC FILTER HOLDER	1	
16	VFK1346	STEP DOWN RING	1	
17	VFK1659	STEP-UP RING	1	(43MM-49MM)
18	VFK1660	STEP-UP RING	1	(49MM-62MM)
19	VFK1481E	LISTA SOFTWARE	1	
20	VFK1409A	MEASURING BOARD	1	
21	VFK1233	MECH. NEUTRAL PLATE	1	
22	VFK1266	GEAR DRIVER	1	
23	VFK1149	POST DRIVER	1	
24	VFK1151	NUT DRIVER (2.5MM)	1	
25	VFK1810	LISTA MEASURING BOARD	1	
26	VFK1186	LISTA CABLE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

MECHANICAL CHASSIS ASSEMBLY (1)

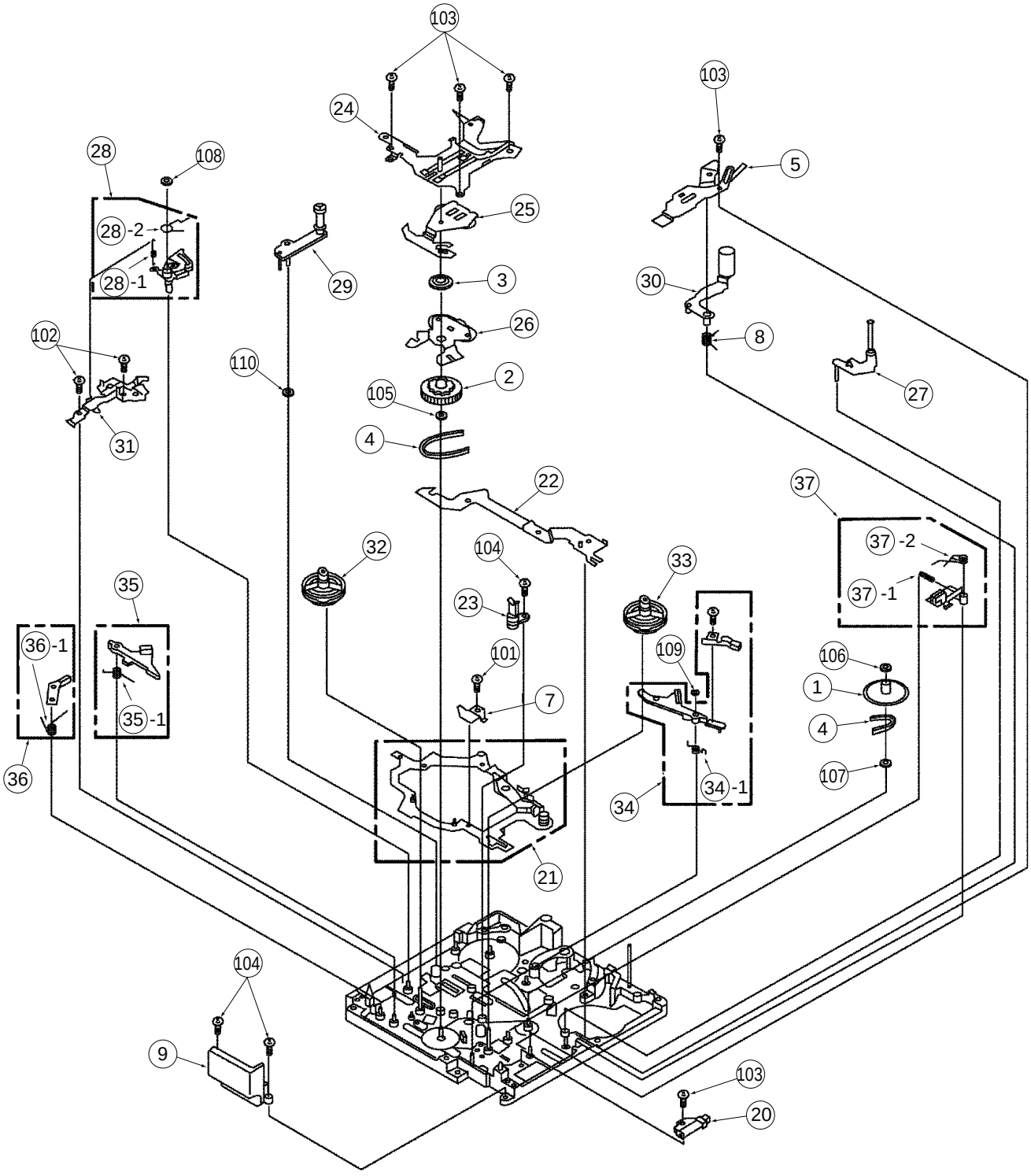


MECHANICAL CHASSIS ASSEMBLY (1)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VEG1573	CYLINDER UNIT	1	(M)
3	VSC4639	SHIELD CASE	1	
4	VES0928	FLEXIBLE CABLE	1	
5	VMA0D82	CAPSTAN COVER	1	
6	VMA9179	RADON PLATE	1	
7	VMD2373	RAIL	1	
8	VSC4640	SHIELD CASE	1	
9	VSR0114	MODE SW	1	(M)
10	VXA5407	CAM GEAR	1	(M)
11	VXA5409	S BOAT ASS'Y	1	(M)
12	VXA5410	T BOAR ASS'Y	1	(M)
13	VXA5417	GEAR BOX	1	(M)
14	VXA5612	RADON ARM ASS'Y	1	
15	VXL2461	T2 ARM ASS'Y	1	
15-1	VMB2789	T2 ARM SPRING	1	
16	VXL3103	CLEANING ARM ASS'Y	1	(M)
17	VXL2470	S1 ARM ASS'Y	1	
18	VXL2471	T1 ARM ASS'Y	1	
19	VMA0P25	CYLINDER HOLD ANGLE	1	
21	VXA5387	GARAGE ASS'Y	1	
22	EYHS77Y7	DEW SENSOR ASS'Y	1	
23	VMD4706	FLEX HOLDER	1	
24	VMB3518	CLEANING SPRING	1	
25	VMP7361	CASSETTE BLINDER PLATE	1	
101	VHD0878	SCREW	1	
102	VHD0989	SCREW	2	
103	XQN14+B4	SCREW	2	
104	VXQ0439	SCREW	3	
105	XQN14+B35	SCREW	2	
106	XQN14+BQ4	SCREW	2	
107	XQN14+B15	SCREW	7	
108	XQN14+B2	SCREW	2	
109	VHD0882	SCREW	4	
111	VMX2027	CUT WASHER	2	
112	XQN2+CF3	SCREW	1	
113	VHD1285	SCREW	2	
114	XQN2+B2FZ	SCREW	2	
E5	VEP05395A	HEAD AMP C.B.A.	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

MECHANICAL CHASSIS ASSEMBLY (2)



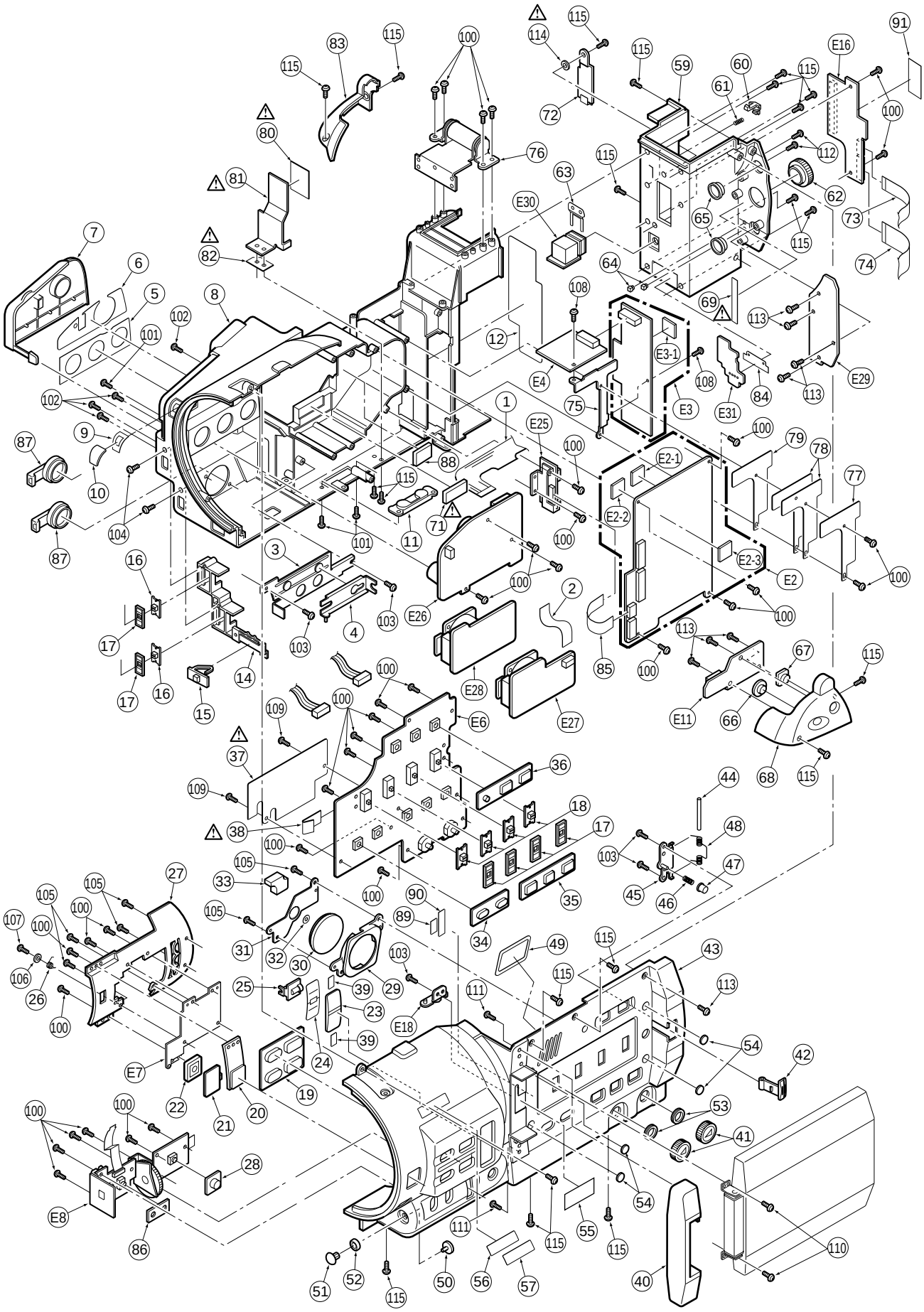
MECHANICAL CHASSIS ASSEMBLY (2)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VDG1445	DRIVE PULLEY	1	
2	VDG1031	CENTER PULLEY	1	
3	VDG1032	SENSOR GEAR	1	
4	VDV0265	TIMING BELT	1	
5	VMA9178	PINCH PRESSURE PLATE	1	
7	VMA9181	BRAKE ROD SUPPORT (T)	1	
8	VMB2776	SPRING	1	
9	VSH0067	MIC SWITCH	1	K0MZ55000001
20	VSJ0114	SOLENOID	1	
21	VXA5401	BRAKE ROD ASS'Y	1	
22	VXA5408	T3 ROD ASS'Y	1	
23	VXA5411	LED HOLDER ASS'Y	1	
24	VXA6576	COVER PLATE ASS'Y	1	
25	VXL2454	P IDLER ARM ASS'Y	1	
26	VXL2455	FR IDLER ARM ASS'Y	1	
27	VXL2456	TENSION ARM ASS'Y	1	(M)
28	VXL2732	PAD ARM ASS'Y	1	(M)
28-1	VMB2788	TENSION SPRING	1	
28-2	VMB2787	PAD ARM SPRING	1	
29	VXL2462	T3 ARM ASS'Y	1	
30	VXL3161	PINCH ARM ASS'Y	1	(M)
31	VXL2466	EJECT ARM ASS'Y	1	
32	VXR0355	SUPPLY REEL TABLE	1	(M)
33	VXR0356	TAKE UP REEL TABLE	1	(M)
34	VXZ0319	TAKE UP MAIN BRAKE	1	
34-1	VMB2782	T MAIN BRAKE SPRING	1	
35	VXZ0321	SUPPLY MAIN BRAKE	1	(M)
35-1	VMB2783	S MAIN BRAKE SPRING	1	
36	VXZ0322	FF BRAKE ASS'Y	1	(M)
36-1	VMB2784	FF BRAKE SPRING	1	
37	VXZ0441	REV BRAKE ASS'Y	1	
37-1	VMB3388	REV SPRING	1	
37-2	VMB3389	REV BRAKE SPRING	1	
101	VHD0884	SCREW	1	
102	XQN14+B15	SCREW	2	
103	VHD0883	SCREW	5	
104	XQN14+B35	SCREW	3	
105	VMX2503	C PULLEY WASHER	1	
106	VMX3122	WASHER	1	
107	VMX2504	WASHER	1	
108	VMX2027	CUT WASHER	1	
109	VMX2028	WASHER	1	
110	VMX2394	WASHER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

FRAME & CASING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.



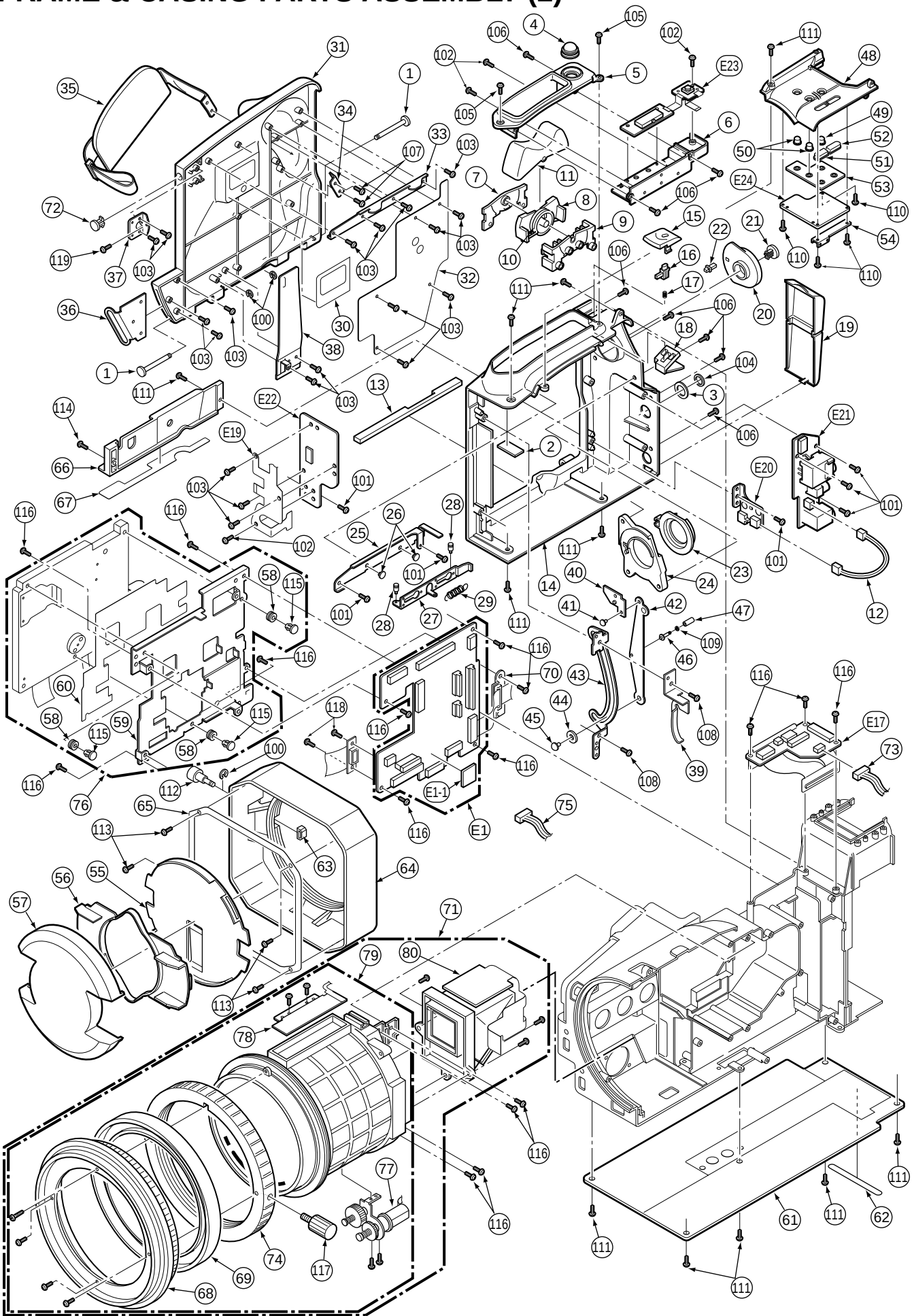
FRAME & CASING PARTS ASSEMBLY (1)

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VWJ1583	SIDE JACK FLEX.	1	
2	VWJ10E5050L0	FLAT CABLE	1	
3	VML3710	CLUTCH SLIDE PLATE	1	
4	VMP7341	CLUTH ANGLE	1	
5	VGH4612	JACK NAME PLATE B	1	
6	VGH4615	JACK NAME PLATE A	1	
7	VJF1470	SIDE JACK CAP	1	
8	VKM5983	CENTER FRAME	1	
9	VMZ3318	AWB COVER HOLDER SHEET	1	
10	VKW3078	AWB WINDOW	1	
11	VMD3345	TRIPOD FRAME	1	
12	VMZ3323	EVR INSULATION SHEET	1	
14	VGQ6902	MIC SWITCHING KNOB HOLDER	1	
15	VGU9246	ZOOM CLUCH KNOB	1	
16	VGU9194	MIC SWITCHING KNOB	2	
17	VMG1460	SLIDE SW RUBBER COVER	6	
18	VGU9214	SLIDE KNOB	4	
19	VGU9200	CAMERA OP BUTTON	1	
20	VGQ6896	FOCUS KNOB HOLDER	1	
21	VGU9213	FOCUS SLIDE KNOB	1	
22	VGU9211	FOCUS BUTTON	1	
23	VGQ6894	ND SWITCHING PIECE	1	
24	VGQ6906	HOLDER BLIND SHEET	1	
25	VGU9222	ND SWITCHING KNOB	1	
26	VMB3681	FOCUS KNOB SPRING	1	
27	VGQ6905	ND FILTER HOLDER	1	
28	VGU9228	IRIS BUTTON	1	
29	VGQ6897	SPEAKER HOLDER	1	
30	VEK9842	SPEAKER ASS'Y	1	
31	VMP7330	SPEAKER HOLDER ANGLE	1	
32	VMT1347	SPEAKER HOLDER CUSHION	1	
33	VMT1367	P.C.B. HOLDER CUSHION	1	
34	VGU9250	RUBBER BUTTON 2	1	
35	VGU9251	RUBBER BUTTON 3	1	
36	VGU9202	RUBBER BUTTON 1	1	
⚠ 37	VSC5460	SIDE (R) SHIELD PLATE	1	
⚠ 38	VMZ3317	C.B.A. PROTECT SHEET	1	
39	VGQ7175	ND KNOB SHEET	2	
40	VGQ6874	HINGE COVER	1	
41	VGU9212	AUDIO ROTATING KNOG	2	
42	VGU9197	MONITOR LOCK KNOB	1	
43	VGP5800	SIDE CASE (R)	1	
44	VMS7187	LCD LOCK SHAFT	1	
45	VMP7331	OPENER HOLDER ANGLE	1	
46	VMB3661	POP UP SPRING	1	
47	VGQ6901	MONITOR KNOB	1	
48	VMB3659	MONITOR OPENER SPRING	1	
49	VKN0169	SPEAKER NET	1	
50	VGU9223	W.BAL KNOB (LOWER)	1	
51	VGU9217	W.BAL KNOB (UPPER)	1	
52	VMG1418	RAIN COVER RUBBER (B)	1	
53	VMG1467	VR WATERPROOF RUBBER	2	
54	VMG1286	CUSHION RUBBER	4	
55	VMZ3316	MONITOR FPC PROTECT SHEET	1	
56	VGQ4088	3CCD BADGE TAPE	1	
57	VGB0322	3CCD BADGE	1	
59	VGP5813	BACK PANEL	1	
60	VGU8582	BATTERY LOCK BUTTON	1	
61	VMB3210	BATTERY LOCK SPRING	1	
62	VGU9218	MODE SELECT KNOB	1	
63	VMP7340	DCIN ANGLE	1	
64	VGL1012	MODE PANEL LIGHT	2	
65	VGU9219	CAMERA/VCR BUTTON	2	
66	VGU9209	JOY STICK BUTTON	1	
67	VGU9199	MENU BUTTON	1	
68	VGQ6924	VF CASE (R)	1	
⚠ 69	VMZ3315	BATTERY BLIND SHEET	1	
⚠ 71	VMG1516	CCD HEAT SINK SHEET	1	
72	VGQ6886	EVR COVER	1	
73	VWJ13E5085L0	FLEX. CABLE	1	
74	VWJ1585	R SIDE FPC	1	
75	VMP7357	C.B.A. HOLDER ANGLE	1	
76	VKC0594	VF HINGE	1	
77	VMZ3340	SHIELD INSULATION PLATE 1	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
78	VSC5478	CAMERA C.B.A. SHIELD	2	
79	VMZ3341	SHIELD INSULATION PLATE 2	1	
⚠ 80	VMG1514	POWER HEAT SINK SHEET 1	1	
⚠ 81	VSC5471	POWER HEAT SINK SHEET	1	
⚠ 82	VMG1515	POWER HEAT SINK SHEET 2	1	
83	VGQ6923	VF CASE (L)	1	
84	VEK8719	BATTERY CATHER	1	K4ZZ04000026
85	VWJ10E5050L0	FLAT CABLE	1	
86	VMG1520	TOGGLE SW CUSHION	1	
87	VJF1468	XLR CAP	2	
88	VMG1517	CCD HEAT SINK	1	
89	VMZ3356	FPC PROTECT SHEET	1	
90	VMZ3357	FPC LOCK SHEET	1	
91	VMZ3345	LED INSULATION PLATE	1	
100	XQN2+B4FN	SCREW	35	
101	XQN16+B4FZ	SCREW	3	
102	XYN26+A6FZ	SCREW	4	
103	XYN2+C4	SCREW	5	
104	XQN16+BJ4FZ	SCREW	2	
105	XQN2+C5	SCREW	6	
106	XWG2	WASHER	1	
107	XQN16+BJ3FZ	SCREW	1	
108	XQN2+B35FN	SCREW	2	
109	XYN2+F5	SCREW	2	
110	XYN2+C6	SCREW	2	
111	XQN2+BJ6	SCREW	2	
112	XQN2+B3FZ	SCREW	2	
113	XQN2+BJ4FZ	SCREW	8	
⚠ 114	VMX3286	WASHER	1	
115	XQN2+B4FZ	SCREW	21	
E2	VEP23571A	CAMERA C.B.A.	1	
E2-1	VEP001A7A	CAMERA SUB 1 C.B.A.	1	
E2-2	VEP001A7B	CAMERA SUB 2 C.B.A.	1	
E2-3	VEP001A7C	CAMERA SUB 3 C.B.A.	1	
E3	VEP01914A	POWER C.B.A.	1	
E3-1	VEP001A6A	POWER SUB C.B.A.	1	
E4	VEP01922A	POWER 2 C.B.A.	1	
E6	VEP04817A	R-SIDE C.B.A.	1	
E7	VEP06E92A	CAMERA OP1 C.B.A.	1	
E8	VEP06E93A	CAMERA OP2 C.B.A.	1	
E11	VEP000Z0A	MENU C.B.A.	1	
E16	VEP000Y2A	EVR CONNECT C.B.A.	1	
E18	VEP000Y4A	LCD OPEN SW C.B.A.	1	
E25	VEP22331A	GYRO C.B.A.	1	
E26	VEP04816A	SIDE JACK C.B.A.	1	
E27	VEP04815A	EXT MIC CH2 C.B.A.	1	
E28	VEP04825A	EXT MIC CH1 C.B.A.	1	
E29	VEP06E89A	MODE SW C.B.A.	1	
E30	VEP01923A	DC IN C.B.A.	1	
E31	VEP01915A	BATTERY C.B.A.	1	

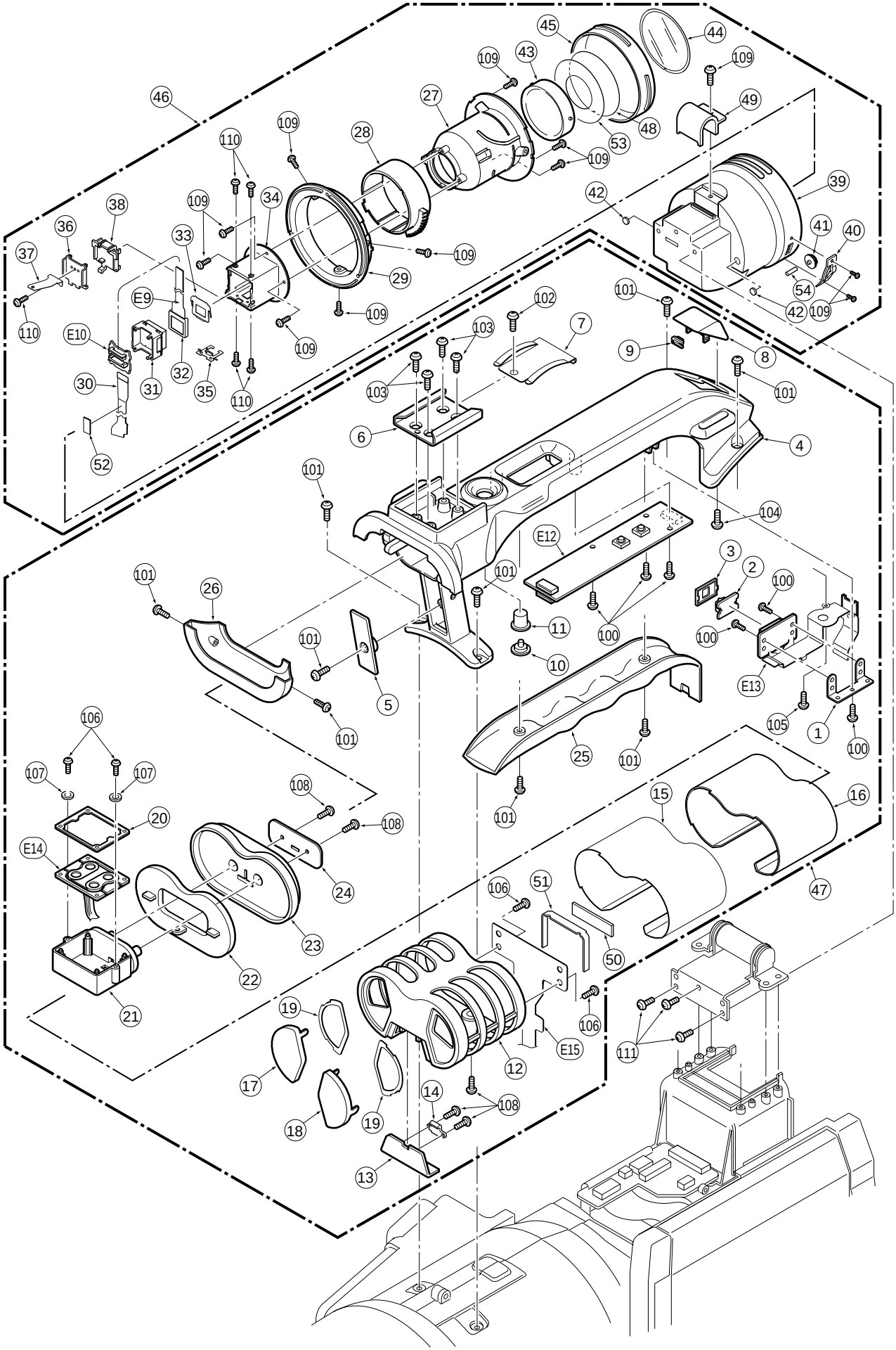
FRAME & CASING PARTS ASSEMBLY (2)



FRAME & CASING PARTS ASSEMBLY (2)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VMS7186	ROTATING SHAFT	2	
2	VMZ3097	POWER INSULATION SHEET C	1	
3	VMX0531	CLATCH SPACER	1	
4	VGU9203	REC CHECK RUBBER BUTTON	1	
5	VGQ6903	ZOON LEVER CASE (R)	1	
6	VGQ6904	ZOON LEVER CASE (L)	1	
7	VGQ6996	ZOOM HOLDER (R)	1	
8	VGQ6997	ZOOM SPRING HOLDER PIECE	1	
9	VGQ6928	ZOOM SW HOLDER	1	
10	VMB3663	COIL SPRING ZOOM	1	
11	VGU9215	ZOOM LEVER	1	
12	VEE0U25	EJECT 1	1	
13	VMT1350	CASSETTE COVER GASKET	1	
14	VGP5801	SIDE CASE (L)	1	
15	VGU9206	EJECT KNOB	1	
16	VGU9216	EJECT LOCK BUTTON	1	
17	VMB3662	EJECT LOCK BUTTON SPRING	1	
18	VGQ6899	EJECT KNOB FIX PIECE	1	
19	VJF1469	H.P CAP	1	
20	VGU9204	POWER BUTTON	1	
21	VGU9205	S/S BUTTON	1	
22	VGU9201	POWER LOCK BUTTON	1	
23	VGQ6998	S/S BUTTON HOLDER	1	
24	VGQ6884	S/S HOLDER PIECE	1	
25	VMP7337	LOCK LEVER HOLDER ANGLE	1	
26	VMS7211	PIN	2	
27	VMP7339	CASSETTE LOCK LEVER	1	
28	VMS7203	EJECT LOCK PIN	2	
29	VMB3680	EJECT LOCK BUTTON SPRING	1	
30	VGH4613	GRIP COVER WINDOW	1	
31	VGP5804	CASSETTE COVER	1	
32	VGF0952	SHIELD PLATE	1	
33	VMP7338	CASSETTE COVER FIX ANGLE	1	
34	VMP6741	BELT HOLDER ANGLE	1	
35	VFB0215	GRIP BELT	1	
36	VMP7325	GRIP BELT ANGLE (FRONT)	1	
37	VMP7501	HOLDER ANGLE	1	
38	VMC1092	CASSETTE DOWN SPRING	1	
39	VMC1835	LINK DUMPER SPRING	1	
40	VMA9219	OPEN ANGLE (A)	1	
41	VMS5748	LINK PIN (B)	1	
42	VMA9220	OPEN LINK (B)	1	
43	VMA0P91	LINK ANGLE	1	
44	VMX2397	ARM STAND ROLLER	1	
45	VMS7293	ARM STAND PIN	1	
46	VMS5747	RINK PIN (A)	1	
47	VDP1653	ROTATION ROLLER	1	
48	VGP5798	TOP PANEL	1	
49	VGU9195	REC BUTTON	1	
50	VGU9210	REC/DUB BUTTON	2	
51	VGU9249	AUDIO MONITOR BUTTON (-)	1	
52	VGU9196	AUDIO MONITOR BUTTON (+)	1	
53	VMG1478	TOP SW BUTTON RUBBER	1	
54	VMP7432	TOP SUPPORT ANGLE	1	
55	VGQ6919	CAP COVER	1	
56	VGQ6920	LENS COVER KNOB	1	
57	VGQ6883	LENS CAP	1	
58	VMG1463	DUSTPROOF RUBBER	3	
59	VMP7336	MECHA HOLDER ANGLE	1	
60	VMZ3295	MECHA BARRIER	1	
61	VGQ6885	BOTTOM COVER	1	
62	VKA0340	GLIP DUSTPROOF RUBBER	1	
63	VGU9255	HOOD FIX PIECE	1	
64	VGQ6882	LENS HOOD	1	
65	VMP7605	LENS HOOD WINDOW	1	
66	VGQ7077	MECHA DUSTPROOF COVER	1	
67	VMT1348	CASSETTE COVER GASKET (U)	1	
68	VXP2212	FOCUS RING ASS'Y	1	
69	VDW0855	FIX RING ASS'Y	1	
70	VJF1472	FLEX. HOLDER	1	
71	VXW0563	CAMERA LENS ASS'Y	1	
72	VGQ7078	RUBBER CAP	1	
73	VEE0T92	INT MIC	1	
74	VDW0854	ZOOM RING	1	
75	VEE0T93	MIK IO	1	
76	VXY1738S	MECHA CHASSIS ASS'Y	1	(M)
77	L6DABFKD0001	ZOOM MOTOR ASS'Y	1	
78	EVAJGGVA3B14	ZOOM ENCODER	1	
79	VXW0565	LENS ASS'Y	1	
80	VXQ1083	PRISM ASS'Y	1	
100	XUC15FX	E-RING	3	
101	XQN2+B3FN	SCREW	7	
102	XQN16+BJ3FZ	SCREW	4	
103	XQN2+BJ4FZ	SCREW	19	
104	VHN0194	SPACER	1	
105	XQN16+B4FZ	SCREW	2	
106	XQN16+BJ4FZ	SCREW	8	
107	XTB26+6GFZ	SCREW	2	
108	XYN2+C6	SCREW	2	
109	VMX2535	WASHER	1	
110	XQN2+B35FN	SCREW	4	
111	XQN2+B4FZ	SCREW	11	
112	VHD1546	SCREW	1	
113	XQN2+BJ5FZ	SCREW	4	
114	XQN2+C6FZ	SCREW	1	
115	VHD1100	SCREW	3	
116	XQN2+B4FN	SCREW	16	
117	VHD1538	SCREW	1	
118	VHD0866	SCREW	2	
119	XYN2+C6	SCREW	1	
E1	VEP03G21A	VTR C.B.A.	1	
E1-1	VEP001A4A	VTR SUB C.B.A.	1	
E17	VEP000Y3A	VC C0NNECT C.B.A.	1	
E19	VEP000Y6A	R JACK CONNECT C.B.A.	1	
E20	VEP000Y7A	EJECT C.B.A.	1	
E21	VEP04819A	REAR JACK C.B.A.	1	
E22	VEP06E96A	POWER SW C.B.A.	1	
E23	VEP06E90A	ZOOM SW C.B.A.	1	
E24	VEP000Y9A	TOP OP C.B.A.	1	

HANDLE & EVF PARTS ASSEMBLY

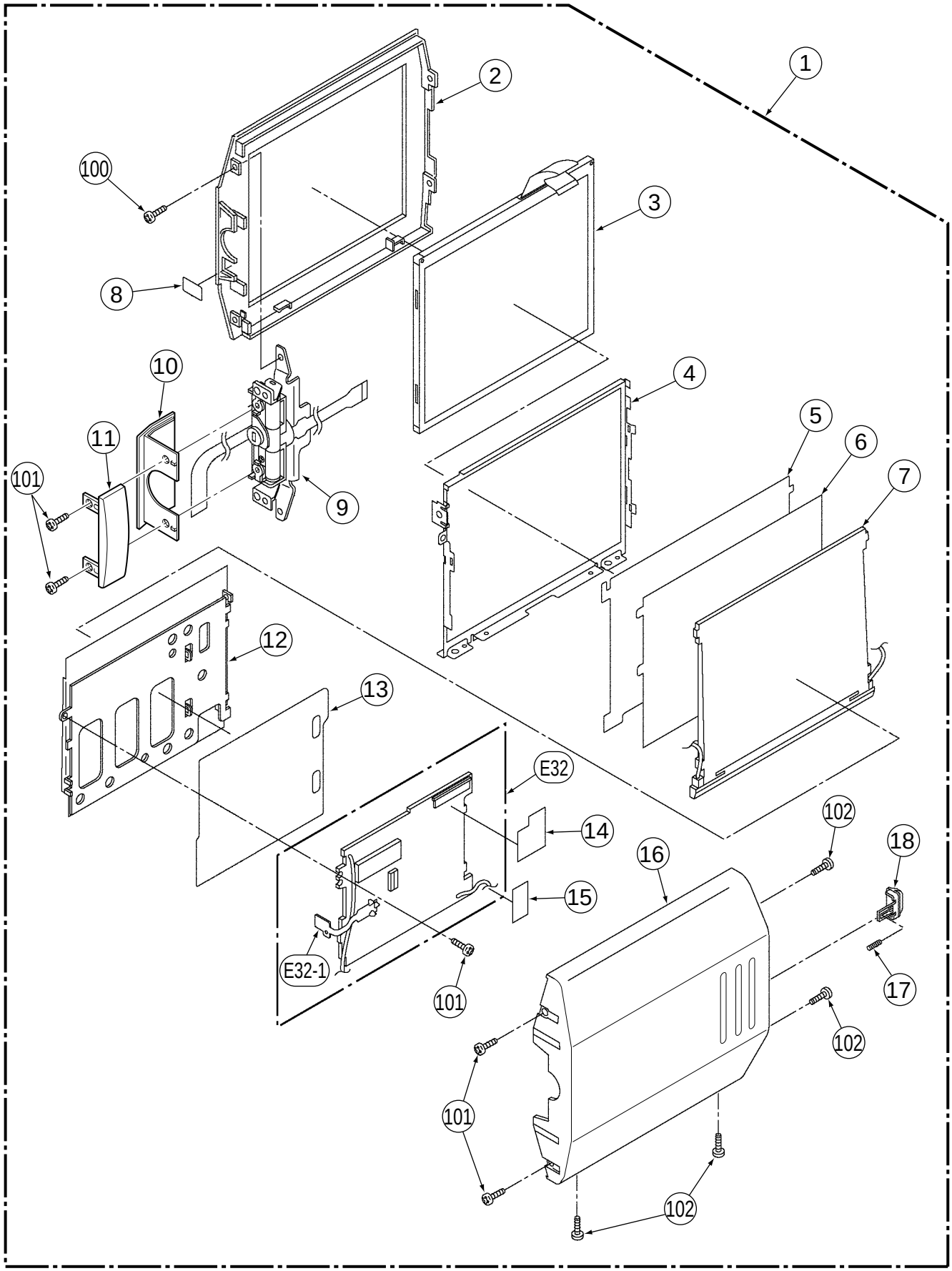


HANDLE & EVF PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VMP7328	HANDLE SLIDE ANGLE	1	
2	VGU9214	SLIDE KNOB	1	
3	VMG1460	SLIDE SW RUBBER COVER	1	
4	VKH0410	HANDLE	1	
5	VGQ6888	HANDLE FRONT COVER	1	
6	VJF1421	SHU	1	
7	VMC1697	SPRING	1	
8	VKW3080	REAR TALLY COVER	1	
9	VGL1011	TALLY LIGNT	1	
10	VMG1479	HANDLE S/S BUTTON RUBBER	1	
11	VGU9207	HANDLE S/S BUTTON	1	
12	VGQ6872	MIC CASE	1	
13	VKW3079	FRONT TALLY COVER	1	
14	VKW3081	FRONT TALLY LIGHT	1	
15	VKN0168	MIC NET (SIDE)	1	
16	VGQ6876	FRONT PUNCHING PANEL 1	1	
17	VGQ6921	FRONT PUNCHING PANEL 2	1	
18	VGQ6877	FRONT PUNCHING PANEL	1	
19	VKN0167	MIC NET (FRONT)	2	
20	VGQ6352	DUMPER HOLDER PIECE	1	
21	VGQ6891	MIC P.C.B. HOLDER	1	
22	VGQ6878	MIC RUBBER FIX PIECE	1	
23	VMG1459	MIC RUBBER HOLDER	1	
24	VMP7329	MIC HOLDER ANGLE	1	
25	VGQ6873	HANDLE COVER	1	
26	VGQ6887	MIC CASE (LOWER)	1	
27	VDK0173	HELICOID	1	
28	VGQ6879	DIOPTER GEAR	1	
29	VGQ6890	EVF FILTER HOLDER	1	
30	VWJ1586	EVF FPC	1	
31	VMX2967	PB SPACER	1	
32	L5BDDXE00001	ACTIVE MATRIX LCD PANEL	1	
33	VGQ7088	LCD MASK	1	
34	VGQ6926	LCD CASE	1	
35	VMC1612	EVF EARTH SPRING	1	
36	VMP7360	EVF COVER ANGLE	1	
37	VMC1808	EVF EARTH SPRING	1	
38	VGQ6927	EVF COVER	1	
39	VGP5799	EVF CASE	1	
40	VGQ3855	DIOPTER ADJUST BRACKET	1	
41	VGU6944	EYE SIGHT ADJ. DIAL	1	
42	VMG1286	CUSHION RUBBER	2	
43	VXW0567	EVF LENS ASS'Y	1	
44	VDL1348	EVF FILTER	1	
45	VGQ6889	EVF EYE CAP HOLDER	1	
46	VEQ3317	EVF ASS'Y	1	
47	VYH0300	HANDLE ASS'Y	1	
48	VGQ7120	FILTER	1	
49	VGQ6892	EVF HINGE COVER	1	
50	VGF0957	MIC SHADING SHEET	1	
51	VMZ3344	INSULATION PLATE	1	
52	VMZ3361	SHEET	1	
53	VMX3293	SHEET	1	
54	VMS7303	EYE SIGHT KNOB SHAFT	1	
100	XQN2+C4	SCREW	6	
101	XQN2+B4FZ	SCREW	9	
102	XSN2+4FC	SCREW	1	
103	XSS2+4FZ	SCREW	4	
104	XQN2+BJ3FZ	SCREW	1	
105	XYN2+J4	SCREW	1	
106	XQN2+BJ4	SCREW	4	
107	XWG2	WASHER	2	
108	XQN2+BJ5FZ	SCREW	5	
109	XQN2+BJ4FZ	SCREW	12	
110	XQN16+C25FZ	SCREW	5	
111	XQN2+CJ6FZ	SCREW	3	
E9	VEP28272B	EVF A C.B.A.	1	
E10	VEP28275B	EVF B C.B.A.	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
E12	VEP06E95A	HANDLE 1 C.B.A.	1	
E13	VEP06F04A	HANDLE 2 C.B.A.	1	
E14	VEP04828A	MIC C.B.A.	1	
E15	VEP06E94A	F TALLY C.B.A.	1	

LCD PARTS ASSEMBLY

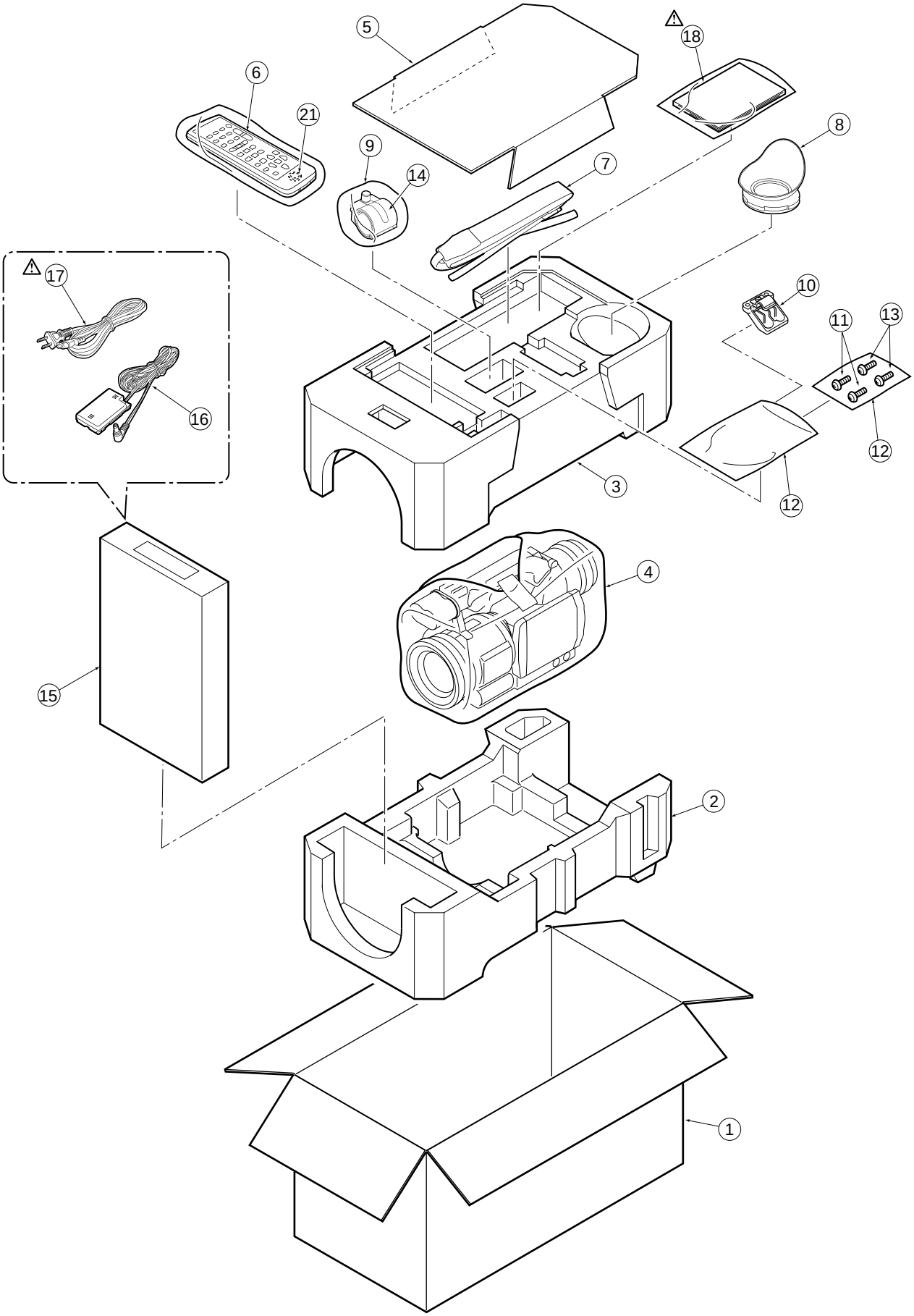


LCD PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYK0K36	LCD ASS'Y	1	
2	VGP5803	LCD CASE (LOWER)	1	
3	L5DDYM00004	LCD PANEL	1	
4	VMP6928	LCD FRAME	1	
5	VGL0917	POLAZING SHEET	1	
6	VGL0916	DIFFUSION SHEET	1	
7	KBLUMJ131VM	BACK LIGHT (1)	1	
8	VGQ4758	BLIND SHEET (A)	1	
9	VXD0357	LCD HINGE (2)	1	
10	VGQ6875	HINGE COVER (LOWER)	1	
11	VGQ6361	HINGE COVER (UPPER)	1	
12	VMP6572	P.C.B. FIX ANGLE	1	
13	VGQ5844	LCD BARRIER	1	
14	VGQ6408	BARRIER (LCD)	1	
15	VGQ5507	BARRIER (LCD-B)	1	
16	VGP5802	LCD CASE (UPPER)	1	
17	VMB3457	LCD LOCK SPRING	1	
18	VGQ6447	LCD LOCK PIECE	1	
100	XQN16+B2FN	SCREW	1	
101	VHD1451	SCREW	5	
102	XQN16+B3FN	SCREW	4	
E32	VEP26257A	MONITOR C.B.A.	1	
E32-1	VEP06E29A	HALL SENSOR FLEX CARD	1	

PACKING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.



PACKING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VPG0Q64	PACKING CASE	1	
2	VPN5826	CUSHION (LOWER)	1	
3	VPN5825	CUSHION (UPPER)	1	
4	VPF0884	POLYETHYLENE BAG	1	
5	VPN5903	PARTITION PLATE	1	
6	VFA0354	WIRELESS REMOTE CONTROL	1	
7	VFC3891	SHOULDER BELT	1	
8	VMG1458	EYE CAP	1	
9	VPF0179	POLYETHYLENE BAG	1	
10	VYC0890	MIC HOLDER ADAPTOR	1	
11	XSB4+6FZ	SCREW	2	
12	VPF1016	POLYETHYLENE BAG	2	
13	XSB4+12FXKS	SCREW	2	
14	VYC0870	MIC HOLDER ASS'Y	1	
15	VPK0825	ACCESSORY BOX	1	
16	VEK8722	DC CABLE ASS'Y	1	
⚠ 17	K2CB2DB00001	POWER CODE	1	
⚠ 18	VQT0A97	OPERATING INSTRUCTIONS	1	
21	CR2025	BATTERY	1	

ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP03G21A	VTR C.B.A.	1	(RTL)
■	VEP001A4A	VTR SUB C.B.A.	1	(RTL)FOR VEP03G21A
■ E2	VEP23571A	CAMERA C.B.A.	1	(RTL)
■	VEP001A7A	CAMERA SUB 1 C.B.A.	1	(RTL)FOR VEP23571A
■	VEP001A7B	CAMERA SUB 2 C.B.A.	1	(RTL)FOR VEP23571A
■	VEP001A7C	CAMERA SUB 3 C.B.A.	1	(RTL)FOR VEP23571A
■ E3	VEP01914A	POWER C.B.A.	1	(RTL)
■	VEP001A6A	POWER SUB C.B.A.	1	(RTL)FOR VEP01914A
■ E4	VEP01922A	POWER 2 C.B.A.	1	(RTL)
■ E5	VEP05395A	H/R AMP C.B.A.	1	(RTL)
■ E6	VEP04817A	R SIDE C.B.A.	1	(RTL)
■ E7	VEP06E92A	CAMERA OP1 C.B.A.	1	(RTL)
■ E8	VEP06E93A	CAMERA OP2 C.B.A.	1	(RTL)
■ E9	VEP28272B	EVF A C.B.A.	1	(RTL)
■ E10	VEP28275B	EVF B C.B.A.	1	(RTL)
■ E11	VEP000Z0A	MENU C.B.A.	1	(RTL)
■ E12	VEP06E95A	HANDLE 1 C.B.A.	1	(RTL)
■ E13	VEP06F04A	HANDLE 2 C.B.A.	1	(RTL)
■ E14	VEP04828A	MIC C.B.A.	1	(RTL)
■ E15	VEP06E94A	F TALLY C.B.A.	1	(RTL)
■ E16	VEP000Y2A	EVR CONNECT	1	(RTL)
■ E17	VEP000Y3A	VC CONNECT C.B.A.	1	(RTL)
■ E18	VEP000Y4A	LCD OPEN SW C.B.A.	1	(RTL)
■ E19	VEP000Y6A	REAR JACK CONNECT C.B.A.	1	(RTL)
■ E20	VEP000Y7A	EJECT C.B.A.	1	(RTL)
■ E21	VEP04819A	REAR JACK C.B.A.	1	(RTL)
■ E22	VEP06E96A	POWER SW C.B.A.	1	(RTL)
■ E23	VEP06E90A	ZOOM SW C.B.A.	1	(RTL)
■ E24	VEP000Y9A	TOP OP C.B.A.	1	(RTL)
■ E25	VEP22331A	GYRO C.B.A.	1	(RTL)
■ E26	VEP04816A	SIDE JACK C.B.A.	1	(RTL)
■ E27	VEP04815A	EXT MIC CH2 C.B.A.	1	(RTL)
■ E28	VEP04825A	EXT MIC CH1 C.B.A.	1	(RTL)
■ E29	VEP06E89A	MODE SW C.B.A.	1	(RTL)
■ E30	VEP01923A	DC IN C.B.A.	1	(RTL)
■ E31	VEP01915A	BATTERY C.B.A.	1	(RTL)
■ E32	VEP26257A	MONITOR C.B.A.	1	(RTL)
■	VEP06E29A	HALL SENSOR FLEX CARD CBA	1	(RTL)FOR VEP26257A

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP03G21A	VTR C.B.A.	1	(RTL)
■	VEP001A4A	VTR SUB C.B.A.	1	(RTL)FOR VEP03G21
C1-10	F1L1E1060018	C.CAPACITOR CH 25V 10U	10	FOR VEP001A4A
C600	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C602	ECUX1H680JCQ	C.CAPACITOR CH 50V 68P	1	
C604	F3F1A226A008	T.CAPACITOR CH 10V 22U	1	
C605	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C606,07	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C610	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C611	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C612	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C614	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C616	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C617	F1J1C105A091	C.CAPACITOR CH 16V 1U	1	
C618-20	F1H0J474A002	T.CAPACITOR CH6.3V 0.47U	3	
C625	F1H0J474A002	T.CAPACITOR CH6.3V 0.47U	1	
C626	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C627	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C628	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C629	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C630	ECJ0EB1C682K	C.CAPACITOR CH 16V 6800P	1	
C631	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C633	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C666	ECJ3YB1C225K	C.CAPACITOR CH 16V 2.2M	1	
C672	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	1	
C2001	F1J0J106A014	T.CAPACITOR CH6.3V 10U	1	
C2002	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C2004-08	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	5	
C2009	F1G1H6R00004	C.CAPACITOR CH 50V 6P	1	
C2010	F1G1H5R00004	C.CAPACITOR CH 50V 5P	1	
C2011-14	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	4	
C2015	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C2017	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2021	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2022	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C2024	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2028	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2029	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2030	F1G1H100A448	C.CAPACITOR CH 50V 10P	1	
C2031	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C2032	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2033	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C2034	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C2035	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2037	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C2038	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2039	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2041	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2043	F1G1H100A448	C.CAPACITOR CH 50V 10P	1	
C2044	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2048	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C2050	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2052	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C2055	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2101	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C2201	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2202,03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C2204	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C2205,06	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C2207	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2208	ECJ0EC1H150J	C.CAPACITOR CH 50V 15P	1	
C2209	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2210	ECUX1A564KBN	C.CAPACITOR CH 10V 0.56U	1	
C2211	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2212	ECUX1A564KBN	C.CAPACITOR CH 10V 0.56U	1	
C2213	ECUX1E223KBV	C.CAPACITOR CH 25V 0.023U	1	
C2214	ECUX1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C2215	ECST0JY475Z	T.CAPACITOR CH6.3V 4.7U	1	
C2216-18	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C2219	ECJ0EC1H270J	C.CAPACITOR CH 50V 27P	1	
C2220	ECJ0EB1E332K	C.CAPACITOR CH 25V 3300P	1	
C2221	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2222	ECUX1E273KBV	C.CAPACITOR CH 25V 0.027U	1	
C2223	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C2225	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2226	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C2227	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2228-30	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C2231,32	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C2233	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C2234	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2235,36	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C2237	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C2238	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C2239	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C2240,41	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	2	
C2242	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C2243	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C2244-48	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	5	
C3001	F3E0J106A005	T.CAPACITOR CH6.3V 10U	1	
C3003	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3004	F3F1A226A008	T.CAPACITOR CH 10V 22U	1	
C3005	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3006	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3007	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3008	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C3009,10	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C3012	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3014	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3015	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3016	F3F0J2260001	T.CAPACITOR CH6.3V 22U	1	
C3017-27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	11	
C3029-33	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C3034	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C3035,36	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C3037	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3038	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C3039	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3041	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3043	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3044	F3E0G1060002	T.CAPACITOR CH 4V 10U	1	
C3045	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3046-49	F1H0J105A002	C.CAPACITOR CH6.3V 1U	4	
C3051	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3052	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3053	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3054	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3061	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C3062	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3063	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3064-67	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C3101	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3102	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3103	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C3104	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3105,06	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C3107	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3108	F3F1A226A008	T.CAPACITOR CH 10V 22U	1	
C3109	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3110	F3H1A1070006	T.CAPACITOR CH 10V 100U	1	
C3111	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3112	ECUX0J225KBN	C.CAPACITOR CH6.3V 2.2U	1	
C3113	F1J0J106A014	T.CAPACITOR CH6.3V 10U	1	
C3114	F3E0G1060002	T.CAPACITOR CH 4V 10U	1	
C3115	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3116	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3117	ECUX0J225KBN	C.CAPACITOR CH6.3V 2.2U	1	
C3119	F3H0J1070005	T.CAPACITOR CH6.3V 100U	1	
C3120	ECST0JY226	T.CAPACITOR CH6.3V 22U	1	
C3121	F3E0G1060002	T.CAPACITOR CH 4V 10U	1	
C3122	ECST0JY226	T.CAPACITOR CH6.3V 22U	1	
C3125	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3126	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3127	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3128	ECUX0J225KBN	C.CAPACITOR CH6.3V 2.2U	1	
C3129	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3131	ECUX0J225KBN	C.CAPACITOR CH6.3V 2.2U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3132	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3134	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3136,37	F1H0J105A002	C.CAPACITOR CH6.3V 1U	2	
C3138	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C3139	F3E0G1060002	T.CAPACITOR CH 4V 10U	1	
C3140,41	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C3142	F3F1A226A008	T.CAPACITOR CH 10V 10U	1	
C3143	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3202	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3203-07	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C3209	F1J0J106A014	T.CAPACITOR CH6.3V 10U	1	
C3211	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3215	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3218	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3220	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C3221-23	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C3226	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3227	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3229	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3252	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3253	F1G1H2210001	C.CAPACITOR CH 50V 220P	1	
C3254	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3255	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3256	F1H0J105A002	C.CAPACITOR CH6.3V 1U	1	
C3257	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3259	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C3501-03	F1J0J475A006	C.CAPACITOR CH6.3V 1U	3	
C3504,05	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C3506	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3507,08	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C3509,10	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	2	
C3511	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	1	
C3512,13	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	2	
C3514,15	F1H0J105A002	C.CAPACITOR CH6.3V 1U	2	
C3516	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3517,18	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C3519	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3521-23	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	3	
C3551	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3552,53	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	2	
C3554	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3555	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3556	F1J0J475A006	C.CAPACITOR CH6.3V 1U	1	
C3557	F1G1A104A014	C.CAPACITOR CH 00V 0.1U	1	
C3558-60	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	3	
C3561	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3562,63	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	2	
C3564	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C3566	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3568	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3569	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C6503	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
D601	MA338	DIODE	1	
D602	MA2J11100L	DIODE	1	
D2001-05	MA2SD2400L	DIODE	5	
D2007	MA2SD2400L	DIODE	1	
D2009	MA2SD2400L	DIODE	1	
D2010	MA2J11100L	DIODE	1	
D2012	MA2J11100L	DIODE	1	
D2013	MA2SD2400L	DIODE	1	
D2014	MA110	DIODE	1	
D2201	MA110	DIODE	1	
D2501	MA2SD2400L	DIODE	1	
D3101	MA2S11100L	DIODE	1	
FP2201	K1MN22B00029	CONNECTOR	1	
FP2202	K1MN09B00027	CONNECTOR	1	
FP2203	K1MN30B00037	CONNECTOR	1	
FP2204	K1KA08A00267	CONNECTOR (MALE)	1	
FP2208	K1MN22B00034	CONNECTOR	1	
FP5001	VJS3801D024	CONNECTOR (FEMALE)	1	
IC601	C0HBA0000094	IC	1	
IC602	C0JBAA000115	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC2001	VSI3842D	IC	1	
IC2002	C0EBK0000063	IC	1	
IC2003	C1ZBZ0001483	IC	1	
IC2004	C0BBAA000008	IC	1	
IC2005	C0BBBA000030	IC	1	
IC2007	C0JBAE000087	IC	1	
IC2008	VSI3982C	IC	1	
IC2009	C0FBBD000081	IC	1	
IC2011	C0CBAAA00012	IC	1	
IC2012	C0EBD0000146	IC	1	
IC2013	C0CBCAC00001	IC	1	
IC2014	C0CBABC00104	IC	1	
IC2015	C0JBAA000102	IC	1	
IC2201	TB6519AF	IC	1	
IC2202,03	UN224	TRANSISTOR-RESISTOR	2	
IC2204	C0JBAA000287	IC	1	
IC2205	TC7S86FU	IC	1	
IC2206	C0GBE0000007	IC	1	
IC2207	TA75S393F	IC	1	
IC2208	TC75W54FU	IC	1	
IC2209	C0JBAA000182	IC	1	
IC3001	C1AB00001130	IC	1	
IC3002	AN2903FJQ-V	IC	1	
IC3004	C0FBZH000013	IC	1	
IC3005	C0ZBZ0000363	IC	1	
IC3006	C0JBAA000102	IC	1	
IC3007	TC7SZ00F	IC	1	
IC3201	C1AB00001132	IC	1	
IC3202	C1AB00001612	IC	1	
IC3501	C1AB00001280	IC	1	
IC3502	BA10324AF	IC	1	
IC3503,04	C1AB00000647	IC	2	
L601	VLQ0426J3R9	COIL 3.9UH	1	G1C3R9J00004
L602,03	G1C100K00019	COIL 10UH	2	
L604	VLQ0807K100	COIL 10UH	1	G1C100K00024
L605,06	VLQ0807K220	COIL 22UH	2	G1C220K00016
L2003	G1C100K00019	COIL 10UH	1	
L3002	G1C100K00019	COIL 10UH	1	
L3006,07	G1C100K00019	COIL 10UH	2	
L3009	G1C100K00019	COIL 10UH	1	
L3011-14	G1C100K00019	COIL 10UH	4	
L3015	G1C101KA0031	COIL 100UH	1	
L3017	G1C100K00025	COIL 10UH	1	
L3021-23	G1C100K00019	COIL 10UH	3	
L3201	G1C100K00019	COIL 10UH	1	
L3501	VLQ0807K100	COIL 10UH	1	G1C100K00024
L3505-10	VLQ0426J330	COIL 33UH	6	G1C330J00005
LB2002	J0JBC0000012	FILTER	1	
LB3001-04	VLF1315A102	FILTER	4	J0JHC0000015
LB3006	VLF1315A102	FILTER	1	J0JHC0000015
LB3101-03	J0JBC0000042	FILTER	3	
LB3201	VLF1315A102	FILTER	1	J0JHC0000015
LB3205	VLF1315A102	FILTER	1	J0JHC0000015
LB3207	VLF1315A102	FILTER	1	J0JHC0000015
LB3502,03	J0JBC0000012	FILTER	2	
P1001	K1KA50A00113	CONNECTOR (MALE)	1	
P1002	VJS3846A030	CONNECTOR (FEMALE)	1	
P2001	K1KAC0A00011	CONNECTOR (MALE)	1	
P2002	K1KBC0A00048	CONNECTOR (FEMALE)	1	
P2003	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
P2207	K1KB20A00021	CONNECTOR (FEMALE)	1	
P2209	VJP3658D030	CONNECTOR (MALE)	1	K1KA30A00090
Q601,02	B1ADGD000005	TRANSISTOR	2	
Q603	XP1501	TRANSISTOR-RESISTOR	1	
Q605	B1ADGD000005	TRANSISTOR	1	
Q608	B1ADGD000005	TRANSISTOR	1	
Q611	2SD2216J0L	TRANSISTOR	1	
Q2007	B1ADGD000005	TRANSISTOR	1	
Q2012	2SD182000L	TRANSISTOR	1	
Q2013	2SB1218AHL	TRANSISTOR	1	
Q2201	2SB1462JRS	TRANSISTOR	1	
Q2202	2SD2216J0L	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q3101-03	2SD1979	TRANSISTOR	3	
Q3501	B1ADGD000005	TRANSISTOR	1	
Q3503,04	2SB1218AHL	TRANSISTOR	2	
Q3505	2SD1819ALL	TRANSISTOR	1	
QR602	XP0431400L	TRANSISTOR	1	
QR604	B1GBCFLL0022	TRANSISTOR	1	
QR2001	UNR511500L	TRANSISTOR	1	
QR2002	UN2130X	TRANSISTOR-RESISTOR	1	
QR2004	B1GBCFGJ0007	TRANSISTOR	1	
QR2005	B1GHCFJA0003	TRANSISTOR	1	
QR2006	B1GBCFNL0007	TRANSISTOR	1	
QR2010	B1GHCFJA0003	TRANSISTOR	1	
QR2011	B1GBCFJN0017	TRANSISTOR	1	
QR2012	B1GDCFJA0006	TRANSISTOR	1	
QR2201	UN9213	TRANSISTOR-RESISTOR	1	
QR2202	UNR9113J0L	TRANSISTOR	1	
QR2203	UN9213	TRANSISTOR-RESISTOR	1	
QR2204	UNR9113J0L	TRANSISTOR	1	
QR3101	B1GDCFLL0017	TRANSISTOR	1	
QR3102	UN9213	TRANSISTOR-RESISTOR	1	
QR3502	UN9213	TRANSISTOR-RESISTOR	1	
R601	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R602-05	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R606	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R608	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R609	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R610,11	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R612	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R613	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R614	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R615	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R616	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R617	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R618,19	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R621	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R622	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R623	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R624,25	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R626	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R627	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R628	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R629	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R630	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R631	ERJ2RHD563	M.RESISTOR CH 1/16W 56K	1	
R632	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R633	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R634	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R635	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R636	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R638-40	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	3	
R642	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R643	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R644	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R647	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R648-50	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R651	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R657	ERJ2GEJ274	M.RESISTOR CH 1/16W 270K	1	
R2001	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R2002	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2003	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2004	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2005,06	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R2007	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2008,09	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2010	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2011	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2012	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2013	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2014	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2015	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R2016	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2017	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R2018	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2019,20	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2021	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R2022	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2023,24	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2025	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2027	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R2028	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2029	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	1	
R2030	ERJ2GEJ274	M.RESISTOR CH 1/16W 270K	1	
R2031	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2032	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
R2033	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2034	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2035	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2036,37	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2038	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R2039	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2040	ERJ8GEYG330	M.RESISTOR CH 1/8W 33	1	
R2041,42	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2044	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2045	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2048,49	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2050	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R2051-53	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R2054	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R2055	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2056,57	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2058	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R2059	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2060	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2061	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2062	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2063	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2064,65	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R2066	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2068	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2069	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2072	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2073	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2075	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2077,78	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2081	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2082	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R2083	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2084	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2085	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2086	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	1	
R2087	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2088-90	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R2091	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2092	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R2093	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2094	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R2097	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R2098	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2099,00	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2101-04	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	4	
R2105	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2106-08	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R2109,10	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R2111	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2112,13	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	
R2114	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2115	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R2116	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R2117	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2118,19	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R2120	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2123	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2124,25	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R2126,27	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	2	
R2129	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R2131	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2132	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R2133	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2136	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R2137	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R2138	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R2139	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R2142	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2143	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2146	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2149	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2161	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R2162	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2164	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2165,66	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2167	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2168	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2169	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2170	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R2171	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2172	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2173	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2174	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2175,76	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2177	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2178	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2182	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2184	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2185	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R2187	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R2188	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	1	
R2189	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2193	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2194	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2195	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R2196	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2197	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2198	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2203,04	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R2206	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2207	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R2209	ERJ2GEJ122	M.RESISTOR CH 1/16W 1.2K	1	
R2210,11	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R2212	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2213	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R2214	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2215	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2216	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R2217,18	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R2219	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2220	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2221	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R2222	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R2223	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R2224	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2225	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R2226	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R2227	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R2228	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R2229	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2230	ERJ8GEYJR33	M.RESISTOR CH 1/8W 0.33	1	
R2231	ERJ8GEYJR47	M.RESISTOR CH 1/8W 0.47	1	
R2232,33	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	
R2234	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2235	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R2236	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	1	
R2237	ERJ2GEJ682	M.RESISTOR CH 1/16W 6.8K	1	
R2238	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	1	
R2239	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R2240	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2241	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2242	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R2243	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R2244	ERJ8GEYJR27	M.RESISTOR CH 1/8W 0.27	1	
R2245	ERJ2RHD471	M.RESISTOR CH 1/16W 470	1	
R2246	EXBV8V331J	COMBI.R-R 330	1	
R2247,48	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	2	
R2249	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3001	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3002	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3004	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3005	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R3006	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3007	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3008	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3009	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3011-13	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R3014	ERJ2GEJ684	M.RESISTOR CH 1/16W 680K	1	
R3015	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R3016	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3017	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3019,20	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	2	
R3021	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R3022-24	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R3030,31	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R3034	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3035	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R3037	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R3041	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3061,62	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R3101	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3102	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R3103	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
R3104	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R3105,06	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R3107	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3108	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R3109	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3110	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R3111	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
R3112	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3113	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R3114	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3115	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3116	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R3117	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	1	
R3118,19	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R3120	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3122	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3124	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R3125	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3126,27	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R3128	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R3129	ERJ2GEJ680	M.RESISTOR CH 1/16W 68	1	
R3130	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3131	ERJ2GEJ750	M.RESISTOR CH 1/16W 75	1	
R3132	ERJ2GEJ680	M.RESISTOR CH 1/16W 68	1	
R3133	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3136	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R3137	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3138	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R3149	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3151	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3152	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3201	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3202	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3203	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R3204	ERJ2RHD181	M.RESISTOR CH 1/16W 180	1	
R3205	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R3209	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3210	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3211,12	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	2	
R3213	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R3215	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3216	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R3217	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3218	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3229	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R3251-54	ERJ2RKD560	M.RESISTOR CH 1/16W 56	4	
R3255,56	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R3257	ERJ2RHD622	M.RESISTOR CH 1/16W 6.2K	1	
R3258	ERJ2RHD181	M.RESISTOR CH 1/16W 180	1	
R3259	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3403	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3432	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3497	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3498	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3501	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R3503	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R3504	ERJ2RHD181	M.RESISTOR CH 1/16W 180	1	
R3505,06	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	2	
R3507	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R3508	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3509	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R3515	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R3551	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3552	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R3553,54	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R3555	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3556	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R3557,58	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	2	
R3560	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3561,62	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R3563	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3564	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	1	
R3565	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3568	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R3580	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3591	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3592	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R3593	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3594	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R5092-95	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R6515,16	ERJ3RBD271	M.RESISTOR CH 1/16W 270	2	
R6518	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R6521-23	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	D0YDR0000005
R9005	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R9007-14	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	8	
R9016-19	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R9021,22	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R9024-28	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
W3401-18	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	18	
X2001	H0J270500024	CRYSTAL OSCILLATOR	1	
X2002	H0J327200051	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMZ3327	INSULATION SHEET	1	FOR VEP001A4A
■ E2	VEP23571A	CAMERA C.B.A.	1	(RTL)
■	VEP001A7A	CAMERA SUB 1 C.B.A.	1	(RTL)FOR VEP23571A
■	VEP001A7B	CAMERA SUB 2 C.B.A.	1	(RTL)FOR VEP23571A
■	VEP001A7C	CAMERA SUB 3 C.B.A.	1	(RTL)FOR VEP23571A
C1	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7A
C1	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7B
C2	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7A
C2	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7B
C2	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	FOR VEP001A7C
C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	FOR VEP001A7A
C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	FOR VEP001A7B
C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	FOR VEP001A7C
C10-12	ECST1AY106Z	T.CAPACITOR CH 10V 10U	3	
C13	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C15	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C16	ECST1EY155	T.CAPACITOR CH 25V 1.5U	1	
C17	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C18	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C19,20	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C22	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C23	ECST1EY155	T.CAPACITOR CH 25V 1.5U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C24	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C25	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C26,27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C29	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C30	ECST1EY155	T.CAPACITOR CH 25V 1.5U	1	
C31	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C32	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C33	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C37-39	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C40-45	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	6	
C46-54	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	9	
C55-60	ECST1AY106Z	T.CAPACITOR CH 10V 10U	6	
C65	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C66	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C101	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C102	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C103,04	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C105	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C106	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C107	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C108-12	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C113	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C114	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C115	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C118	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C119	ECST1CY475	T.CAPACITOR CH 16V 4.7U	1	
C120-22	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C123	F1K1H1050002	C.CAPACITOR CH 50V 1U	1	
C126	F1K1H1050002	C.CAPACITOR CH 50V 1U	1	
C128	ECST1EX475	T.CAPACITOR CH 25V 4.7U	1	
C129	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C130	ECST1VY105Z	T.CAPACITOR CH 35V 1U	1	
C131	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C132	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C133-36	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C140	ECUX1C104ZFQ	C.CAPACITOR CH 16V 0.1U	1	
C141	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C142	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C143-45	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	3	
C146,47	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C148,49	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	2	
C151-53	ECST1AY106Z	T.CAPACITOR CH 10V 10U	3	
C154	ECST1CY475	T.CAPACITOR CH 16V 4.7U	1	
C158-61	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C162	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C170	F1K1H1050002	C.CAPACITOR CH 50V 1U	1	
C171	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C173	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C174	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C176,77	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C178,79	F3G1A4760002	T.CAPACITOR CH 10V 47U	2	
C180	ECST1EX475	T.CAPACITOR CH 25V 4.7U	1	
C181-85	F1L1E1060018	C.CAPACITOR CH 25V 10U	5	
C191-98	F1L1E1060018	C.CAPACITOR CH 25V 10U	8	
C202,03	ECA1EHG331	E.CAPACITOR 25V 330U	2	
C301,02	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	2	
C308	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C310	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C311	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C313	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C314	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C315	ECUX1C153KBQ	C.CAPACITOR CH 16V 0.015U	1	
C319-22	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C325	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C327	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C328	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C329	ECUX1C153KBQ	C.CAPACITOR CH 16V 0.015U	1	
C330	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C337	F1G1H8R00003	C.CAPACITOR CH 50V 8P	1	
C338	F1G1H5R00004	C.CAPACITOR CH 50V 5P	1	
C343	ECUX1C153KBQ	C.CAPACITOR CH 16V 0.015U	1	
C344	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C348,49	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C350	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C351	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C352,53	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C362	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C363	ECUX1C153KBQ	C.CAPACITOR CH 16V 0.015U	1	
C701	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C702	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C703	F1G1C822A040	C.CAPACITOR CH 16V 8.2U	1	
C704	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C705	ECUX1H390JCQ	C.CAPACITOR CH 50V 39P	1	
C706,07	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C708	ECJ0EB1E272K	C.CAPACITOR CH 25V 2700P	1	
C709	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C710	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C711,12	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C713	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C714	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C715	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C716	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C717	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C718	ECUX1H151JCQ	C.CAPACITOR CH 50V 150P	1	
C719	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C720	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C721	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C722,23	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C724	F3F1D4750002	T.CAPACITOR CH 20V 4.7U	1	
C725	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C727,28	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C729	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C730	F1G1E392A056	C.CAPACITOR CH 25V 3900P	1	
C734	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C735	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C744	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C745	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C746	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C748	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C751	ECUX1E471KBQ	C.CAPACITOR CH 25V 470P	1	
C752	F1G1E392A056	C.CAPACITOR CH 25V 3900P	1	
C753	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C754	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C755	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C757	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C763,64	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C765,66	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	2	
C767	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C768,69	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C770,71	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	2	
C772	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C773-75	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C776	F3F1D4750002	T.CAPACITOR CH 20V 4.7U	1	
C777	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C779	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C780	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C781	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C782	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C783	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C784	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C786-88	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C789	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C790	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C791	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C794	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C796	ECUX1C274KBN	C.CAPACITOR CH 16V 0.27U	1	
C797	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C798,99	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C801	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C802	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C803	F3E0J106A005	T.CAPACITOR CH6.3V 10U	1	
C805	F3E0J106A005	T.CAPACITOR CH6.3V 10U	1	
D101	MA121	DIODE	1	
D102	MA132A	DIODE	1	
D103	MA121	DIODE	1	
D303	B0JCDD000002	DIODE	1	
D305,06	B0JCDD000002	DIODE	2	
IC1	C1AB00001677	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC1	TC7W53F	IC	1	FOR VEP001A7A
IC1	TC7W53F	IC	1	FOR VEP001A7B
IC1	TC7W53F	IC	1	FOR VEP001A7C
IC2,C3	C1AB00001677	IC	2	
IC101	C1ZBZ0001836	IC	1	
IC102	C0JBAB000004	IC	1	
IC103	C0JBAB000003	IC	1	
IC104,05	TC7SH32FU	IC	2	
IC106	C0JBAF000162	IC	1	
IC107	TC7SH32FU	IC	1	
IC108	C0JBAF000184	VHC	1	
IC109	TC7SH04F	IC	1	
IC110	C0JBAA000115	IC	1	
IC111,12	C0JBAB000543	IC	2	
IC113	C0DBCGF00001	IC	1	
IC114	C0CBADG00002	IC	1	
IC116	NJM431U	IC	1	C0DBEZC00003
IC117	UPD16510GR	IC	1	
IC118	C0JBAA000102	IC	1	
IC119	UPD16510GR	IC	1	
IC120	C0JBAE000140	IC	1	
IC121	C0ABCA000038	IC	1	
IC122	C0JBAD000071	IC	1	
IC123	TC7SH32FU	IC	1	
IC124	C0JBAA000102	IC	1	
IC301	VSI3844B	IC	1	
IC303	MN7GD02B5DB	IC	1	
IC304	TC7W74FU	IC	1	
IC307	VSI3983B	EEPROM	1	
IC308	C0JBAF000162	IC	1	
IC309	C0FBAF000029	IC	1	
IC313	TC7SH04F	IC	1	
IC315,16	TC7SH14FU	IC	2	
IC317	C0JBAA000102	IC	1	
IC701	C0ABCA000053	IC	1	
IC702	C1AB00001159	IC	1	
IC703	C0CBAEC00006	IC	1	
IC704	C1AB00001262	IC	1	
IC707	C1AB00000431	IC	1	
IC709	C0FBAG000033	IC	1	
IC710	C0GBG0000028	IC	1	
IC711	C0CBAEC00006	IC	1	
IC713	C0CBADC00034	IC	1	
IC717	TC75W54FU	IC	1	
IC719	C0CBADC00034	IC	1	
L4-L6	VLQ0807K100	COIL 10UH	3	G1C100K00024
L101	G1C100KA0004	COIL 10UH	1	
L102	G1C100K00025	COIL 10UH	1	
L103,04	VLQ0807K100	COIL 10UH	2	G1C100K00024
L105	G1C100K00025	COIL 10UH	1	
L106,07	VLQ0807K100	COIL 10UH	2	G1C100K00024
L303	G1C4R7MA0031	COIL 4.7UH	1	
L304	VLQ0807K100	COIL 10UH	1	G1C100K00024
L307	VLQ0807K100	COIL 10UH	1	G1C100K00024
L309	G1C100K00019	COIL 10UH	1	
L701	VLQ0807K100	COIL 10UH	1	G1C100K00024
L702	VLQ0807K220	COIL 22UH	1	G1C220K00016
L703,04	VLQ0807K100	COIL 10UH	2	G1C100K00024
L706	VLQ0807K220	COIL 22UH	1	G1C220K00016
L707-09	VLQ0807K100	COIL 10UH	3	G1C100K00024
P1000	K1KB80A00092	CONNECTOR (FEMALE)	1	
P1001	VJS3846A030	CONNECTOR (FEMALE)	1	
P1002	VJS3791D015	CONNECTOR (FEMALE)	1	
P1003	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
P1004	K1MN39B00006	CONNECTOR	1	
P1006	K1MN51B00007	CONNECTOR	1	
Q101,02	2SB0970X0L	TRANSISTOR	2	
Q103	2SB709A-R	TRANSISTOR	1	
Q110	B1HBCFD00001	TRANSISTOR	1	
Q306	XN0460100L	TRANSISTOR-RESISTOR	1	
Q701	2SB0970X0L	TRANSISTOR	1	
Q708	2SB0970X0L	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q709	2SD221000L	TRANSISTOR	1	
QR301	B1GDBEJG0002	TRANSISTOR	1	
QR303	UNR9215J0L	TRANSISTOR	1	
QR705	UNR9211J0L	TRANSISTOR	1	
QR708,09	UNR9213J0L	TRANSISTOR	2	
R1-R3	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R22	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R23	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R24	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R64-66	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R75	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R78	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R81	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R85	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R102,03	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R104,05	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R106,07	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R112	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R113	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R114-20	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	7	
R121	ERJ2GEJ180	TRANSISTOR	1	
R125	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R126	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R128	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R129	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R130-34	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
R135	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R149	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R150,51	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R152,53	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R159-61	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	3	
R164,65	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R169	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R170	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R171	ERJ2RHD511	TRANSISTOR	1	
R172	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R173	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R179-81	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R182	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R183	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R184	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
R185	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R187	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R197	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R198	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R201	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R202	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
R203	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R204	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R206	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R207	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
R208	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R209	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R211	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R212	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
R213	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R214	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R220	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R221	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R222-24	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	3	
R225	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R226	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R231,32	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R233	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R236	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R301,02	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	2	
R304	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R308,09	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R310,11	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	
R312	ERJ2GEJ682	M.RESISTOR CH 1/16W 6.8K	1	
R313	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R314	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R317,18	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R320	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R322	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R323,24	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R326	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R328	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R329-35	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	7	
R339	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R341	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R342	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R346	ERJ2GEJ122	M.RESISTOR CH 1/16W 1.2K	1	
R347,48	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	2	
R350	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R352	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R354,55	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R356	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R357	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R358	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R360	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R361,62	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R367	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R368	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R370	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R371	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R373	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R375	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R376	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R377,78	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	2	
R380	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R391,92	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R427	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R429,30	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	2	
R432	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R433	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R439	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R466	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R470,71	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R472	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R481	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R485	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R486	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R487	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R488,89	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	2	
R490	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R493-09	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	17	
R510	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R511	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R512	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R519	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R520	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R521-26	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	6	
R527-32	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	6	
R533-36	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	4	
R537	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R540-42	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R543-45	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	3	
R546-48	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R549,50	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R551	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R553-55	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R556-60	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	5	
R561	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R562-68	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	7	
R571	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R572-76	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
R578	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R701	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R702	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R703,04	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	2	
R705	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R706	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R707	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R708	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R709	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R712	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R714	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R715	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R716-18	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	3	
R719	ERJ2GEJ564	M.RESISTOR CH 1/16W 560K	1	
R720	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R721	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R722	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R723,24	ERJ6RBB472	M.RESISTOR CH 1/10W 4.7K	2	
R725,26	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R727	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R728	ERJ2GEJ154	M.RESISTOR CH 1/16W 150K	1	
R729	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R730	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R731	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R732	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R733	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	1	
R734,35	ERJ3GEYJ2R2	M.RESISTOR CH 1/16W 2.2	2	
R736	ERJ6GEYJ1R0	M.RESISTOR CH 1/10W 1	1	
R737	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R738	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R739	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R740	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R741	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R742,43	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R744	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R745	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R747	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R748,49	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R750	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R751	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R752	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R753	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R754,55	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R760	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R765	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R768	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R770	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R771	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R776	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R778	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R780,81	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R786	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R787	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R788	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R789	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R797	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R799	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R801,02	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	2	
R804	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R807,08	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	2	
R813	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R814	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R815	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R816,17	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	2	
R821,22	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R823	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R824	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R825	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R830	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R831,32	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R837	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R856-60	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
R862	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R863	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R873	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R892	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R896	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R897	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R898	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R900	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R901,02	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	2	
R908	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R917	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R918	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R919	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R920	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R926	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R939	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R941,42	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R952	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R953,54	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R967	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R968-71	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R974-76	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R978	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R979	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R990	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R991	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R992	ERJ8GEYJ2R2	M.RESISTOR CH 1/8W 2.2	1	
R993	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R994	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R995,96	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R997,98	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R999	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1001-04	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R1068-74	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	7	
R1077-82	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	6	
R1084	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1087	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1089-98	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	10	
R1103	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1105,06	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R1108	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1125	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1134	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
X101	H1A3155B0002	CRYSTAL OSCILLATOR	1	
X302	H0J270500024	CRYSTAL OSCILLATOR	1	
■ E3	VEP01914A	POWER C.B.A.	1	(RTL)
■	VEP001A6A	POWER SUB C.B.A.	1	(RTL)FOR VEP01914A
C1,C2	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	FOR VEP001A6A
C1001,02	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	2	
C1011	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1012	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1013	ECJ0EB1E331K	C.CAPACITOR CH 25V 330P	1	
C1014	ECJ0EB1E222K	C.CAPACITOR CH 25V 2200P	1	
C1021	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1022	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1023	ECJ0EB1E331K	C.CAPACITOR CH 25V 330P	1	
C1024	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C1031	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1032	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1033	ECJ0EB1E392K	C.CAPACITOR CH 25V 1U	1	
C1041	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1042	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1043	ECJ0EB1E331K	C.CAPACITOR CH 25V 330P	1	
C1044	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C1052	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
C1053	ECJ0EB1E272K	C.CAPACITOR CH 25V 2700P	1	
C1054	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C1056	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C1061	ECJ0EB1E152K	C.CAPACITOR CH 25V 1500P	1	
C1062	ECJ0EB1E332K	C.CAPACITOR CH 25V 3300P	1	
C1063-66	F1J1A335A005	C.CAPACITOR CH 10V 3.3U	4	
C1071	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1074	F1G1A473A014	C.CAPACITOR CH 10V 0.047U	1	
C1101	F1G1H2210001	C.CAPACITOR CH 50V 220P	1	
C1102	F1H1A334A028	C.CAPACITOR CH 10V 0.33U	1	
C1103	F1G1A473A014	C.CAPACITOR CH 10V 0.047U	1	
C1104-06	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C1107,08	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C1112	F1G1A473A014	C.CAPACITOR CH 10V 0.047U	1	
C1113	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1114	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1121,22	ECJ0EB1C682K	C.CAPACITOR CH 16V 6800P	2	
C1123	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1124	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1131	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C1132	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C1133	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1134	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1141	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1142	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C1143	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1144	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1151,52	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	2	
C1153	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1154	ECJ0EC1H820J	C.CAPACITOR CH 50V 82P	1	
C1155	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1171	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1172	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C1173	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C1174	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1181	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1211,12	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C1215	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1221-27	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	7	
C1228	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C1231	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1239	F3F1A1060001	T.CAPACITOR CH 10V 10U	1	
C1241,42	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C1248	ECST0JX476Z	T.CAPACITOR CH6.3V 47U	1	
C1281	F1L1E1060018	C.CAPACITOR CH 25V 10U	1	
C1312	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1322,23	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C1341	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1501,02	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C1717-20	VCK0303K225	C.CAPACITOR 2.2U	4	
C1722	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C1725,26	F1L2A1050004	C.CAPACITOR CH 10V 1U	2	
C1728	F1L2A1050004	C.CAPACITOR CH 10V 1U	1	
D1051	MA2J11100L	DIODE	1	
D1053	B0JCCE000006	DIODE	1	
D1061,62	MA2S72800L	DIODE	2	
D1101	MA8100-M	DIODE	1	
D1151	MAZ81800HL	DIODE	1	
D1152	MA2S11100L	DIODE	1	
D1309	MA2J11100L	DIODE	1	
D1518	MA3S132E0L	DIODE	1	
D1519	B0ADDJ000011	DIODE	1	
D1520	MAZ80620HL	DIODE	1	
D1521	B0BC4R200013	DIODE	1	
D1522	MA8130-M	DIODE	1	
D1706	U1GU44	DIODE	1	
D1707	MA2S11100L	DIODE	1	
IC1001	C0DBAFA00012	IC	1	
⚠ IP1003	K5H8011A0004	FUSE	1	
⚠ IP1701	K5H1021A0004	IC	1	
L1001	G1C4R7MA0024	COIL 4.7UH	1	
L1011	A921CY-470M	COIL 47UH	1	G1C470MA0011
L1021	G1C220MA0011	COIL 22UH	1	
L1031	G1C680MA0024	COIL 68UH	1	
L1041	G1C220MA0011	COIL 22UH	1	
L1061	G1ZZ00000059	COIL	1	
L1062	G1ZZ00000060	COIL	1	
L1111	J0JAC0000011	FILTER	1	
L1121	J0JAC0000011	FILTER	1	
L1131	J0JAC0000011	FILTER	1	
L1141	J0JAC0000011	FILTER	1	
L1151	J0JAC0000011	FILTER	1	
L1171	J0JAC0000011	FILTER	1	
L1211,12	G1C4R7MA0031	COIL 4.7UH	2	
L1215	VLQ0319K4R7	COIL 4.7UH	1	
L1221	VLQ0319K4R7	COIL 4.7UH	1	
L1222	G1C4R7M00008	COIL 4.7UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L1223,24	G1C100K00019	COIL 10UH	2	
L1225,26	G1C4R7MA0031	COIL 4.7UH	2	
L1227	G1C100KA0002	COIL 10UH	1	
L1231	G1C100MA0031	COIL 100UH	1	
L1241	VLQ0319K4R7	COIL 4.7UH	1	
L1242	G1C4R7MA0002	COIL 4.7UH	1	
L1281	G1C100K00019	COIL 10UH	1	
L1311	G1C4R7MA0031	COIL 4.7UH	1	
L1321	VLQ0319K4R7	COIL 4.7UH	1	
L1341	G1C4R7MA0031	COIL 4.7UH	1	
L1501	J0JHC0000018	FILTER	1	
L1703	G1C100K00016	COIL 10UH	1	
L1706	G1C100K00019	COIL 10UH	1	
P1501	VEE0V03	POWER CABLE	1	
P1701	K1KB50B00025	CONNECTOR (FEMALE)	1	
P1702	K1KA30B00055	CONNECTOR (MALE)	1	
P1703	VJS3846A030	CONNECTOR (FEMALE)	1	
Q1011	FP102	TRANSISTOR	1	
Q1021	XN09D5700L	TRANSISTOR	1	
Q1022	B1DFCD000011	TRANSISTOR	1	
Q1031	XN09D5700L	TRANSISTOR	1	
Q1041	XN09D5700L	TRANSISTOR	1	
Q1042	B1DFCD000011	TRANSISTOR	1	
Q1051	2SB766A-R	TRANSISTOR	1	
Q1061,62	FP102	TRANSISTOR	2	
Q1101	B1ADCF000059	TRANSISTOR	1	
Q1341	B1ADGD000005	TRANSISTOR	1	
Q1342	XP1501	TRANSISTOR-RESISTOR	1	
Q1501	B2ABGP000001	THYRISTOR	1	
Q1702	XP0460100L	TRANSISTOR	1	
Q1704	2SJ278	TRANSISTOR	1	
QR1001	B1GDCFGN0009	TRANSISTOR	1	
QR1101	UNR9214J0L	TRANSISTOR	1	
QR1102	UN9213	TRANSISTOR-RESISTOR	1	
QR1161	B1GDCFJA0006	TRANSISTOR	1	
QR1162	UN9115	TRANSISTOR-RESISTOR	1	
R1002	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1011	ERJ2RHD682	M.RESISTOR CH 1/16W 6.8K	1	
R1012,13	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1014	ERJ2RHD391	M.RESISTOR CH 1/16W 390	1	
R1015	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1016	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1021	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1022,23	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1024	ERJ2RHD221	M.RESISTOR CH 1/16W 220	1	
R1025	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1026	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R1031	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R1032,33	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1034	ERJ2RHD151	M.RESISTOR CH 1/16W 150	1	
R1035	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1036	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1041	ERJ2RHD821	M.RESISTOR CH 1/16W 820	1	
R1042,43	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1044	ERJ2RHD181	M.RESISTOR CH 1/16W 180	1	
R1045	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1046	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R1051	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R1052,53	ERJ2RKD820	M.RESISTOR CH 1/16W 82	2	
R1054	ERJ2RHD151	M.RESISTOR CH 1/16W 150	1	
R1055	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1056	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R1061,62	ERJ2GEJ122	M.RESISTOR CH 1/16W 1.2K	2	
R1074	ERJ2RHD391	M.RESISTOR CH 1/16W 390	1	
R1075	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1076	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R1101	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1102	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R1103	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1104	ERJ2GEJ123	M.RESISTOR CH 1/16W 12K	1	
R1107	ERJ2GEJ225	M.RESISTOR CH 1/16W 2.2M	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1108	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1109	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1111	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	1	
R1112	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R1116	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1121	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1122	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1126	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1131	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1132	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1136	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1141	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1142	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1146	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1151	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1152	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R1153	ERJ2RHD243	M.RESISTOR CH 1/16W 24K	1	
R1154	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R1155	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1156	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1161	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1171	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1172	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R1176	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R1179	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1182	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1221	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1309	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1323	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1341	ERJ2GEJ121	M.RESISTOR CH 1/16W 120	1	
R1343	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1344	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1345	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R1402	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R1501	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1502	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1505	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1519	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	1	
R1520	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1521	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1523	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1733	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1738	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	1	
R1739	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1746	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1749	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
T1051	G5D1A0000026	TRANSFORMER	1	
T1701	G5DYA0000051	TRANSFORMER	1	
		MISCELLANEOUS		
	VSC5413	CCD HEAT SINK	1	
■ E4	VEP01922A	POWER 2 C.B.A.	1	(RTL)
C1251	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
C1252	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C1391	F3F1A226A008	T.CAPACITOR CH 10V 22U	1	
C1451	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1456	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1491	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1801,02	VCK0303K225	C.CAPACITOR 2.2U	2	
C1803	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C1805	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1806	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C1808	F1G1A473A014	C.CAPACITOR CH 10V 0.047U	1	
C1809	F1G1H2210001	C.CAPACITOR CH 50V 220P	1	
C1810	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1812	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1813	ECJ0EB1C682K	C.CAPACITOR CH 16V 6800P	1	
C1814	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1815	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C1816	VCK0303K225	C.CAPACITOR 2.2U	1	
C1821	ECJ0EB1E331K	C.CAPACITOR CH 25V 330P	1	
C1823,24	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	2	
C1827	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	
C1830	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1831	VCK0303K225	C.CAPACITOR 2.2U	1	
C1832	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
D1801	MA2J11100L	DIODE	1	
D1802,03	MA2S11100L	DIODE	2	
D1805	MA3J70000L	DIODE	1	
D1807	MA2S11100L	DIODE	1	
D1808	MA8120-M	DIODE	1	
D1809,10	MAZ82700ML	DIODE	2	
D1811	MA3S132E0L	DIODE	1	
D1812	MA2S11100L	DIODE	1	
IC1391	C0DBZFZ00003	IC	1	
IC1801	BA9743AFV	IC	1	C0DBAZC00010
L1251	G1C100KA0004	COIL 10UH	1	
L1252	G1C100K00019	COIL 10UH	1	
L1801,02	J0JAC0000011	FILTER	2	
L1804	G1C331M00006	COIL 330UH	1	
L1805	G1C100K00019	COIL 10UH	1	
L1807	VLQ0319K100	COIL 10UH	1	G1C100K00023
P1801	K1KB30B00029	CONNECTOR (FEMALE)	1	
Q1351	2SD2216J0L	TRANSISTOR	1	
Q1391	2SB798	TRANSISTOR	1	B1BDBC000001
Q1451	2SD1819AHL	TRANSISTOR	1	
Q1452	XP1401	TRANSISTOR-RESISTOR	1	
Q1453	B1ADCF000059	TRANSISTOR	1	
Q1491	2SD2216J0L	TRANSISTOR	1	
Q1803	XP0460100L	TRANSISTOR	1	
Q1805	2SD1328-R	TRANSISTOR	1	
Q1806	B1DHCC000029	TRANSISTOR	1	
QR1352	UNR9111J0L	TRANSISTOR	1	
QR1451	UN9213	TRANSISTOR-RESISTOR	1	
QR1801	XP0121300L	TRANSISTOR	1	
QR1803	UN9213	TRANSISTOR-RESISTOR	1	
QR1804	UN9112J	TRANSISTOR	1	
QR1806	XP0111300L	TRANSISTOR	1	
R1451	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1452	ERJ2RHD391	M.RESISTOR CH 1/16W 390	1	
R1453	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1454	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R1455	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1456	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R1457,58	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R1491	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1492	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R1493	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1494	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1801,02	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R1804	ERJ2RHD243	M.RESISTOR CH 1/16W 24K	1	
R1805	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R1806,07	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	2	
R1808	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1809	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R1810	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R1811,12	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R1813,14	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	2	
R1815	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1816	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1817	ERJ2RHD271	M.RESISTOR CH 1/16W 270	1	
R1819	ERJ2GEJ334	M.RESISTOR CH 1/16W 330K	1	
R1820	ERJ2GEJ684	M.RESISTOR CH 1/16W 680K	1	
R1821	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1822	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1823	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R1824	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R1825	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1826	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1827	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1828	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R1829	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	1	
R1831	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1832	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1834	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R1835	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R1836	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1837	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	1	
R1842,43	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R1846	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1848	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1849	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1850	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1851	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
		MISCELLANEOUS		
	VSC5415	MECHA SHIELD SHEET	1	
■ E5	VEP05395A	H/R AMP C.B.A.	1	(RTL)
C5001	F3F1C1060002	T.CAPACITOR CH 16V 10U	1	
C5002,03	F1J0J475A006	C.CAPACITOR CH6.3V 1U	2	
C5004	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5005	ECJ0EB1E681K	C.CAPACITOR CH 25V 680P	1	
C5006	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5008	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5012	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C5013	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C5014	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C5016-18	F3F1C1060002	T.CAPACITOR CH 16V 10U	3	
C5021-24	F1G1H8R00003	C.CAPACITOR CH 50V 8P	4	
IC5001	AN3732FJMEFV	IC	1	
L5001	G1C101KA0031	COIL 100UH	1	
L5002,03	G1C100K00019	COIL 10UH	2	
P5001	K1MN08B00040	CONNECTOR	1	
R5001	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R5004	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R5006	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R5007,08	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R5009-12	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	4	
R5015	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
		MISCELLANEOUS		
	VSC4639	SHIELD CASE	1	
■ E6	VEP04817A	R SIDE C.B.A.	1	(RTL)
C4601	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C4602	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4605	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4607	ECST1VV106	E.CAPACITOR CH 35V 10M	1	
C4617	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C4618	ECST1AC226ZR	T.CAPACITOR CH 10V 22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4619	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C4620	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4622,23	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	2	
D4601	MA142K	DIODE	1	
D4604,05	MA142WA	DIODE	2	
D4606,07	MA142K	DIODE	2	
D4608	MA142WA	DIODE	1	
D4609	MA142K	DIODE	1	
IC4601	TA75W558FU	IC	1	C0ABBA000042
IC4605	AN77L09M	IC	1	
P4601	K1KA04B00137	CONNECTOR (MALE)	1	
P4603	K1KA08B00137	CONNECTOR (MALE)	1	
P4604	K1MN51B00007	CONNECTOR	1	
P4605	K1KA02B00053	CONNECTOR (MALE)	1	
P4606	K1MN27B00034	CONNECTOR	1	
P4607	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
P4608	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
Q4601	2SD1819A0L	TRANSISTOR	1	
QR4601,02	UN5212	TRANSISTOR-RESISTOR	2	
R4618	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4620	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4622,23	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4625	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R4627-29	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R4630	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R4632,33	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4635	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4637	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R4638	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4639	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4640,41	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4644,45	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R4690,91	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
SW4601	K0D123A00076	SWITCH	1	
SW4602	K0D122A00126	SWITCH	1	
SW4604,05	K0D122A00126	SWITCH	2	
SW4606,07	EVQQW101M	SWITCH	2	
SW4609-14	EVQQW101M	SWITCH	6	
VR4601,02	D2BBA14A0002	V.RESISTOR 10K	2	
■ E7	VEP06E92A	CAMERA OP1 C.B.A.	1	(RTL)
D301-04	MA142WA	DIODE	4	
P301	K1MN10B00052	CONNECTOR	1	
SW301	K0D113B00029	SWITCH	1	
SW302-06	K0H1BA000442	SWITCH	5	
		MISCELLANEOUS		
	VMP7335	C.B.A. HOLDER ANGLE	1	
	XQN2+B3FN	SCREW	2	
■ E8	VEP06E93A	CAMERA OP2 C.B.A.	1	(RTL)
D351,52	MA142WA	DIODE	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D353,54	MA142K	DIODE	2	
SW351,52	K0E112A00108	SWITCH	2	
SW353	K0H1BA000251	SWITCH	1	
SW355	EVQQW101M	SWITCH	1	
SW356	K9AA01500015	SWITCH	1	
		MISCELLANEOUS		
	VGQ6917	MENU ROTATION KNOB SHEET	1	
	VGU9198	ROTATION KNOB	1	
	XQN2+B3FN	SCREW	4	
	VMP7353	W. BAL ANGLE	1	
	VMP7342	IRIS JOG ANGLE	1	
■ E9	VEP28272B	EVF A C.B.A.	1	(RTL)
REF1	K1MN16B00039	CONNECTOR	1	
REF2	K1MN19B00029	CONNECTOR	1	
■ E10	VEP28275B	EVF B C.B.A.	1	(RTL)
REF1	A2CD00000030	TRANSISTOR	1	
REF2	B1DFCL000006	TRANSISTOR	1	
REF3	ETJ11K90AM	TRANSFORMER	1	
REF4	F1L1A2260013	C.CAPACITOR CH 10V 22U	1	
REF5	G1C100KA0005	COIL 10UH	1	
■ E11	VEP000Z0A	MENU C.B.A.	1	(RTL)
D610-12	MA142WA	DIODE	3	
D614-16	MA142WA	DIODE	3	
P610	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
SW608	K0H1ZA000001	SWITCH	1	
SW609	EVQQWS01M	SWITCH	1	
■ E12	VEP06E95A	HANDLE 1 C.B.A.	1	(RTL)
C451,52	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	2	
C453	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C454,55	ECUM1E823KBN	C.CAPACITOR CH 25V 0.082U	2	
C456,57	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	2	
C458,59	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	2	
C460,61	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	2	
C462	ECST1AX226Z	T.CAPACITOR CH 10V 22U	1	
C463	ECST1CC226Z	T.CAPACITOR CH 16V 22U	1	
C464	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
D451-53	MA142K	DIODE	3	
IC451,52	TA75W01FU	IC	2	
P451	VJS3801B020	CONNECTOR (FEMALE)	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P452	K1MN10B00052	CONNECTOR	1	
P453	K1MN07B00070	CONNECTOR	1	
Q451,52	2SD1819A0L	TRANSISTOR	2	
Q453	2SD1824	TRANSISTOR	1	
R453,54	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R457,58	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R459-62	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	4	
R463,64	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R465,66	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R467,68	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	2	
R469	ERJ3GEYJ133	M.RESISTOR CH 1/16W 13K	1	
R481	ERJ3GEYJ133	M.RESISTOR CH 1/16W 13K	1	
R482,83	ERJ3GEYJ623	M.RESISTOR CH 1/16W 62K	2	
R486	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R487	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R488	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R489,90	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R491-94	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	4	
SW451	RSH1A77ZA-A	SWITCH	1	K0H1BA000104
SW452,53	K0H1BA000433	SWITCH	2	
		MISCELLANEOUS		
	VGQ6880	HANDLE S/S HOLDER	1	
	VGQ6881	T/W BUTTON HOLDER	1	
	VGU9208	HANDLE T/W BUTTON	1	
	VMS7185	HANDLE ZOOM SHAFT	1	
	XUC15FP	E-RING	2	
	XQN2+CJ5	SCREW	2	
	VMG1480	HANDLE T/W BUTTON RUBBER	1	
■ E13	VEP06F04A	HANDLE 2 C.B.A.	1	(RTL)
C471	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C472	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
D471,72	MA142K	DIODE	2	
D473	B3AAB0000129	LED	1	
IC471	VEK8283	REMOTE CONTROL RECEIVER	1	B3RZB0000001
R471	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R472	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
SW471	K0D123A00035	SWITCH	1	
W471,72	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
■ E14	VEP04828A	MIC C.B.A.	1	(RTL)
C4801-04	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	4	
C4806	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C4808	ECJ0EB1E102K	C.CAPACITOR CH 25V 1000P	1	
C4809	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C4810	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C4811	F1G1C223A004	C.CAPACITOR CH 16V 0.022U	1	
C4812	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C4813	F3E0J106A005	T.CAPACITOR CH6.3V 10U	1	
C4814	ECST0JY226	T.CAPACITOR CH6.3V 22U	1	
FP4801	K1MN07B00072	CONNECTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4801	C0ABBB000081	IC	1	
M4801-04	WM-61B102A	ECM	4	
Q4801	2SD2216J	TRANSISTOR	1	
R4801-04	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	4	
R4805-12	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	8	
R4813	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R4814	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R4815	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
		MISCELLANEOUS		
	VMT1249	MIC DUNPER	1	
	VWJ1590	INT MIC FLEX.	1	
■ E15	VEP06E94A	F TALLY C.B.A.	1	(RTL)
C401	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C402	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
D401	B3AAB0000129	LED	1	
IC401	VEK8283	REMOTE CONTROL RECEIVER	1	B3RZB0000001
R401	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R402	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
■ E16	VEP000Y2A	EVR CONNECT	1	(RTL)
B51	VSB0407	BATTERY	1	
P51	K1KA30B00055	CONNECTOR (MALE)	1	
P52	K1MN51B00007	CONNECTOR	1	
P53	K1MN16A00038	CONNECTOR	1	
P54	VJS3791B013	CONNECTOR (FEMALE)	1	
P55	K1KA60A00065	CONNECTOR	1	
P56	K1KBC0B00009	CONNECTOR (FEMALE)	1	
R52	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
■ E17	VEP000Y3A	VC CONNECT C.B.A.	1	(RTL)
P551	K1KBC0A00051	CONNECTOR (FEMALE)	1	
P552	VJS3826C024	CONNECTOR (FEMALE)	1	
P553	K1MN12B00105	CONNECTOR	1	
P556	K1KA04B00137	CONNECTOR (MALE)	1	
P557	K1KA80A00098	CONNECTOR (MALE)	1	
P559	K1MN18A00026	CONNECTOR	1	
■ E18	VEP000Y4A	LCD OPEN SW C.B.A.	1	(RTL)
SW701	K0L1BA000015	SWITCH	1	

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Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		MISCELLANEOUS		
	VMP7354	C.B.A. HOLDER ANGLE	1	
	XQN2+B3FN	SCREW	1	
	VEE0U27	LCD OPEN CABLE	1	
■ E19	VEP000Y6A	REAR JACK CONNECT C.B.A.	1	(RTL)
P251	K1KB30A00128	CONNECTOR (FEMALE)	1	
		MISCELLANEOUS		
⚠	VMZ3097	POWER INSULATION SHEET C	1	
■ E20	VEP000Y7A	EJECT C.B.A.	1	(RTL)
P651	K1KA02B00053	CONNECTOR (MALE)	1	
SW651	K0L1BA000015	SWITCH	1	
		MISCELLANEOUS		
	VMP7334	EJECT C.B.A. HOLDER ANGLE	1	
	XQN2+B3FN	SCREW	2	
■ E21	VEP04819A	REAR JACK C.B.A.	1	(RTL)
J49012	VJJ0522	JACK	1	K2HC103B0082
J49013	VJJ0182	SYNC EDIT JACK	1	K2HB103B0015
L49013,14	VLF1315A102	FILTER	2	J0JHC0000015
P49011	K1KA02A00237	CONNECTOR (MALE)	1	
P49012	K1MN16B00112	CONNECTOR	1	
R49011-16	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	6	
T49012	VLF1394	FILTER	1	J0MAB0000077
■ E22	VEP06E96A	POWER SW C.B.A.	1	(RTL)
D502	MA142WA	DIODE	1	
P501	K1MN10B00070	CONNECTOR	1	
P502	K1MN06B00013	CONNECTOR	1	
SW501	VMG0763	SWITCH	1	
SW502	K0L1BA000015	SWITCH	1	
SW503	K0L1BA000037	SWITCH	1	
		MISCELLANEOUS		
	VMP7434	C.B.A. HOLDER ANGLE	1	
	XQN2+B3FN	SCREW	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E23	VEP06E90A	ZOOM SW C.B.A.	1	(RTL)
C201,02	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
D202	MA142K	DIODE	1	
SW201	EVQQWS01M	SWITCH	1	
VR201	D2B1B15B0001	V.RESISTOR 100K	1	
■ E24	VEP000Y9A	TOP OP C.B.A.	1	(RTL)
D601-03	MA142WA	DIODE	3	
D605	MA142WA	DIODE	1	
SW601-04	EVQQWS01M	SWITCH	4	
SW606	EVQQWS01M	SWITCH	1	
■ E25	VEP22331A	GYRO C.B.A.	1	(RTL)
C101	F3G1A4760002	T.CAPACITOR CH 10V 47U	1	
C102,03	ECST0JY226	T.CAPACITOR CH6.3V 22U	2	
C104-07	F1J0J106A014	T.CAPACITOR CH6.3V 10U	4	
C108,09	ECUX1H471KBV	C.CAPACITOR CH 50V 470P	2	
C112	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C113	ECUX1C105ZFX	C.CAPACITOR CH 16V 1U	1	
C116,17	ECUX1H471KBV	C.CAPACITOR CH 50V 470P	2	
C120	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C121	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C122	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C123	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C124	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C125	F3G1C2260001	T.CAPACITOR CH 16V 22U	1	
IC101	L2ES00000005	IC	1	
IC102	L2ES00000006	IC	1	
IC103	C0ABCA000042	IC	1	
IC104	C0JBAS000065	IC	1	
IC105	C0ABAA000046	IC	1	
L101	G1C100K00019	COIL 10UH	1	
L103,04	G1C100K00019	COIL 10UH	2	
P101	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
R101,02	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R103-06	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	4	
R107	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R110	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R111,12	ERJ3GEYJ274	M.RESISTOR CH 1/16W 270K	2	
R113,14	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R115-18	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R119,20	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
		MISCELLANEOUS		
	XQN2+B4FN	SCREW	1	
	VMP7352	GYRO ANGLE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E26	VEP04816A	SIDE JACK C.B.A.	1	(RTL)
C4451,52	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	2	
C44711	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C44712	ECUX1A474KBV	C.CAPACITOR CH 10V 0.1U	1	
D4451	MA3062M	DIODE	1	
D44711	PH310	DIODE	1	B3GA00000001
D44712	MA132WA	DIODE	1	
J4401	K1FA104A0011	CONNECTOR	1	
J4451	K2HA303A0019	JACK	1	
J4452	K2HZ104A0002	S TERMINAL JACK	1	
L4402,03	J0MAB0000110	FILTER	2	
L4452,53	VLF1315A102	FILTER	2	J0JHC0000015
P4401	K1MN22B00034	CONNECTOR	1	
Q44711	2SD10300SL	TRANSISTOR	1	
Q44712	2SD1819A-R	TRANSISTOR	1	
R4451-54	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R4460,61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4463	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4464	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R44711	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	D0GD225JA003
R44712	ERJ3GEYJ106	M.RESISTOR CH 1/16W 10M	1	
R44713	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R44714	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R44715	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
TH4401	D4CC11030012	THERMISTOR	1	
■ E27	VEP04815A	EXT MIC CH2 C.B.A.	1	(RTL)
C4003,04	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C4006	ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	1	
C4009,10	ECA1HEN4R7	E.CAPACITOR 50V 4.7U	2	
C4013	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4016,17	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C4019	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4020	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4022	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4026	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4030	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4031	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4032	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4034	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4035	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4036	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4107	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
D4001	MA142WK	DIODE	1	
D4002,03	MA3J14300L	DIODE	2	
D4007	MA142K	DIODE	1	
IC4001	NJM2122M	IC	1	
IC4002	TA75W558FU	IC	1	C0ABBA000042
IC4007	TC7W53F	IC	1	
IC4008	AN77L09M	IC	1	
J4101	K1AB103A0007	CONNECTOR (MALE)	1	
L4001,02	VLQ0163J100	COIL 10UH	2	G1C100J00001
L4101	VLF1315A102	FILTER	1	J0JHC0000015

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L4103	VLF1315A102	FILTER	1	J0JHC0000015
L4110	VLF1315A102	FILTER	1	J0JHC0000015
P4001	K1KA20A00048	CONNECTOR (MALE)	1	
P4002	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
Q4002	2SB1220-R	TRANSISTOR	1	
QR4002	UNR521300L	TRANSISTOR	1	
QR4004	UNR521300L	TRANSISTOR	1	
QR4006	UNR521300L	TRANSISTOR	1	
QR4008	UNR511300L	TRANSISTOR	1	
QR4010	UNR521300L	TRANSISTOR	1	
R4006	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4009,10	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R4015,16	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R4019,20	ERJ3RBD132	M.RESISTOR CH 1/16W 1.3K	2	
R4021	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4022	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4024	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4030	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R4031,32	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4040	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R4044,45	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R4048,49	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R4051	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R4053	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R4055	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R4057	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R4060	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4061	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4062	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4066	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
SW4001	K0D142A00023	SWITCH	1	
■ E28	VEP04825A	EXT MIC CH1 C.B.A.	1	(RTL)
C4001,02	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C4005	ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	1	
C4007,08	ECA1HEN4R7	E.CAPACITOR 50V 4.7U	2	
C4011	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4012	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4014,15	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C4018	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4021	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4023	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4024	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4025	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4027,28	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C4029	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4033	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4037	EEVHB1H3R3	E.CAPACITOR 50V 3.3U	1	
C4038	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4108	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
D4004,05	MA3J14300L	DIODE	2	
D4006	MA142K	DIODE	1	
IC4003	AN77L09M	IC	1	
IC4004	NJM2122M	IC	1	
IC4005	TA75W558FU	IC	1	C0ABBA000042
IC4006	TC7W53F	IC	1	
J4102	K1AB103A0007	CONNECTOR (MALE)	1	
L4003,04	VLQ0163J100	COIL 10UH	2	G1C100J00001
L4105	VLF1315A102	FILTER	1	J0JHC0000015
L4107,08	VLF1315A102	FILTER	2	J0JHC0000015

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Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P4003	VJS3791D010	CONNECTOR (FEMALE)	1	K1MN10B00021
Q4001	2SB1220-R	TRANSISTOR	1	
Q4003	2SD1819A0L	TRANSISTOR	1	
Q4004	2SD1824	TRANSISTOR	1	
QR4001	UNR521300L	TRANSISTOR	1	
QR4003	UNR521300L	TRANSISTOR	1	
QR4005	UNR521300L	TRANSISTOR	1	
QR4007	UNR511300L	TRANSISTOR	1	
QR4009	UNR521300L	TRANSISTOR	1	
R4001	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4007,08	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R4011,12	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R4013	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4014	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4017,18	ERJ3RBD132	M.RESISTOR CH 1/16W 1.3K	2	
R4023	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4029	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R4033,34	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4035	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4036	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R4037	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4039	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R4042,43	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R4046,47	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R4050	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R4052	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R4054	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R4056	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R4058	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4059	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4063	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4064	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4067	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
SW4002	K0D142A00023	SWITCH	1	
■ E29	VEP06E89A	MODE SW C.B.A.	1	(RTL)
D151	MA142WA	DIODE	1	
D152-56	MA142K	DIODE	5	
D157	B3AAB0000037	DIODE	1	
D158	B3ABB0000086	LED	1	
D160	MA142K	DIODE	1	
P152	VJS3791B013	CONNECTOR (FEMALE)	1	
R154	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R155	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
SW151	K0G119A00024	SWITCH	1	
SW152,53	K0H1BA000251	SWITCH	2	
■ E30	VEP01923A	DC IN C.B.A.	1	(RTL)
J31	VJS3381	CONNECTOR (FEMALE)	1	K2EC2B000001
■ E31	VEP01915A	BATTERY C.B.A.	1	(RTL)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2,C3	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
D1	NSD03A20	DIODE	1	B0ECMM000002
⚠ IP1	K5H312300003	FUSE	1	
L2	J0MAB0000060	FILTER	1	
P1	K1KA03B00102	CONNECTOR (MALE)	1	
■ E32	VEP26257A	MONITOR C.B.A.	1	(RTL)
■	VEP06E29A	HALL SENSOR FLEX CARD CBA	1	(RTL)FOR VEP26257A
C901	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C902	F3F0G476A009	T.CAPACITOR CH 4V 47U	1	
C903	F3F0J226A007	T.CAPACITOR CH6.3V 22U	1	
C905,06	ECJ4YB1C106V	C.CAPACITOR CH 16V 10U	2	
C907	F3F0J335A008	T.CAPACITOR CH6.3V 3.3U	1	
C908,09	ECJ0WB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C910-13	F1H0J474A002	T.CAPACITOR CH6.3V 0.47U	4	
C914	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C915	ECJ1ZB1C104K	C.CAPACITOR CH 16V 0.1U	1	
C916-19	ECJ0WB1C103K	C.CAPACITOR CH 16V 0.01U	4	
C923	ECJ1VC1H471G	C.CAPACITOR CH 50V 470P	1	
C925	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C930	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C931	ECJ0EC1H330J	C.CAPACITOR CH 50V 33P	1	
C932	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	
C933	ECJ2YB1C474K	C.CAPACITOR CH 16V 0.47U	1	
C934	ECJ0WB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C935	ECJ0EB1C682K	C.CAPACITOR CH 16V 6800P	1	
C936,37	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C938	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C939	ECJ1VC1H331G	C.CAPACITOR CH 50V 330P	1	
C940	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C941	F1G1H100A448	C.CAPACITOR CH 50V 10P	1	
C942	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	1	
C943,44	ECJ1VB1A224K	T.CAPACITOR CH 10V 0.22U	2	
C945	ECJ0EB1E332K	C.CAPACITOR CH 25V 3300P	1	
C946	ECJ4YB1C106V	C.CAPACITOR CH 16V 10U	1	
C947,48	ECJ1ZB1C104K	C.CAPACITOR CH 16V 0.1U	2	
C949	ECJ0WB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C950	F1J1C105A091	C.CAPACITOR CH 16V 1U	1	
C952	ECJ1ZB1C104K	C.CAPACITOR CH 16V 0.1U	1	
D901	MA338	DIODE	1	
D902	MA6Z12100L	DIODE	1	
D903	MA3S132D0L	DIODE	1	
D904	MA4X159A0L	DIODE	1	
D905,06	B0JCEE000002	DIODE	2	
D907	MA2J11100L	DIODE	1	
D908	MAZ80270LL	DIODE	1	
D909	MA8043-M	DIODE	1	
D910	B0BC6R100014	DIODE	1	
FP901	K1MN24B00068	CONNECTOR	1	
FP903	K1MN25B00035	CONNECTOR	1	
IC901	C0HBA0000071	IC	1	
IC903	C0JBAB000350	IC	1	
IC904	C0JBAB000391	IC	1	
IC905	SN74LV04APW	IC	1	C0JBAB000247
IC991	DN8797MSC	IC	1	
L901-04	VLQ0807K100	COIL 10UH	4	G1C100K00024
L905	G1C100MA0031	COIL 100UH	1	
L907	VLQ0426J3R3	COIL 3.3UH	1	G1C3R3J00009

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q901	B1ADCF000059	TRANSISTOR	1	
Q902	B1CFNG000001	TRANSISTOR	1	
Q903	XP0460100L	TRANSISTOR	1	
Q904	XP1501	TRANSISTOR-RESISTOR	1	
Q905	B1ACGD000006	TRANSISTOR	1	
Q906-08	XP0460100L	TRANSISTOR	3	
QR901,02	B1GBCFNA0014	TRANSISTOR	2	
QR903	B1GBCFJN0017	TRANSISTOR	1	
QR904	UNR9214J0L	TRANSISTOR	1	
R901-03	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	3	
R904	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R905	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R906	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R907-09	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R910,11	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R912-14	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	3	
R918	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R919	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R920	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R921	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R922	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R923	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R924	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R925	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R926	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R927	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R928	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R929	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R930,31	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R932	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R933	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R934	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R935	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R936	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R937	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R938	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R940	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R941-43	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R944	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R945	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R946	ERJ2RHD823	M.RESISTOR CH 1/16W 82K	1	
R947	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R951	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	1	
R952	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R953	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R954	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R955	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R956	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R957	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R958	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R959	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R960	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R961	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R962	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	1	
R963	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R964	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R965,66	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	2	
R967	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R968,69	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	2	
R970	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R971	ERJ3GEYJ335	M.RESISTOR CH 1/16W 3.3M	1	
R972	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R973,74	ERJ8GEYJ335	M.RESISTOR CH 1/8W 3.3M	2	
R975	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R976	ERJ3RBD681	M.RESISTOR CH 1/16W 680	1	
R977	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R978	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1	
R979	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R985,86	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	2	
T901	ETJ09K44AZ	TRANSFORMER	1	
T902	EFTU21R203	TRANSFORMER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
W901	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
W902	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	

Service Manual

Specifications

[GENERAL]

Supply voltage: DC 7.2/7.9 V
Power consumption:
6.8 W (when viewfinder is used)
7.8 W (when LCD monitor is used)
9.2 W (max.)

indicates safety information.

Ambient operating temperature
32°F to +104°F (0°C to +40°C)
Ambient operating humidity
10% to 85% (no condensation)
Weight
3.652 lb (1.66 kg)
(excluding battery and accessories)
Dimensions (W×H×D)
5 1/2×6 5/16×14 3/8 inches
(139×160×364 mm)
Recording format
Digital video SD format
Tape format
Mini DV
Recorded video signals
525i (NTSC)
In the progressive mode, the signals are converted into the 525i system and recorded.
Shooting mode
60i (525i)
Progressive mode (30P, 24P or 24P advance)
Recorded audio signals
PCM digital recording
16 bits: 48 kHz/2 channels
12 bits: 32 kHz/4 channels
Recording tracks
Digital video, audio signals:
helical track
Time code:
helical track (sub-code area)
Tape speed
SP mode: 18.812 mm/sec.
LP mode: 12.555 mm/sec.
Recording time (when AY-DVM60 is used)
SP mode: 60 minutes
LP mode: 90 minutes
Tape used
6.35 mm wide metal tape
FF/REW time
Approx. 85 sec. (when AY-DVM60 is used)

[VIDEO]

Sampling frequency
Y: 13.5 MHz, PB/PR: 3.375 MHz
Quantizing
8 bits
Video compression system
DCT + variable length code
Error correction
Reed-Solomon product code

[AUDIO]

Sampling frequency
48 kHz/32 kHz
Quantizing
16 bits/12 bits
Frequency response
20 Hz to 20 kHz
Wow & flutter
Below measurable limits

[CONNECTORS]

VIDEO IN/OUT (input/output automatically switched)
Pin jack, analog composite input/output, 1.0 V [p-p], 75 Ω
S-VIDEO IN/OUT (input/output automatically switched)
S-connector, Y/C separate signal input/output, Y: 1.0 V [p-p], C: 0.286 V [p-p], 75 Ω
AUDIO IN/OUT (input/output automatically switched)
Pin jacks ×2 (CH1, CH2)
Input: 316 mV, high impedance
Output: 316 mV, 600 Ω
DV
4-pin, digital input/output, IEEE 1394 standard complied with
INPUT 1, INPUT 2
XLR (3 pins) ×2 (CH1, CH2)
LINE/MIC switching, high impedance
LINE : 0 dBu
MIC : –50 dBu/–60 dBu (menu selection)
DC INPUT
7.9 V
PHONES
Stereo (3.5 mm diameter), 77 mV, 32 Ω
CAM REMOTE
Mini jack (2.5 mm diameter)
Pick-up device
Interline transfer 1/3-inch CCD image senser (×3)
Number of pixels
Total number of pixels: 410,000,
Number of effective pixels: 380,000
(pixel offset system)
Lens
Leica DICOMAR optical image stabilizer lens, motorized/manual mode switching, 10× zoom
F1.6 (f = 4.5 to 45 mm)
(35 mm equivalent: 32.5 to 325 mm)
Optical system
Prism system
ND filters
1/8, 1/64
Gain
0, +3, +6, +9, +12, +18 dB (60i mode only)
Shutter speeds
Preset
60i mode:
1/60 (OFF), 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 sec.
30P mode:
1/30, 1/50 (OFF), 1/60, 1/120, 1/250, 1/500, 1/1000 sec.
24P, 24P (ADV) mode:
1/24, 1/50 (OFF), 1/60, 1/120, 1/250, 1/500, 1/1000 sec.
Synchro scan
60i mode:
1/60.3 to 1/250.0 sec.
30P mode:
1/30.1 to 1/250.0 sec.
24P, 24P (ADV) mode:
1/24.1 to 1/250.0 sec.
Minimum subject illuminance
3 lux (F1.6, 18 dB gain, 50 IRE video output)
Lens hood
Large-sized lens hood with wide angle of view
Filter diameter
72 mm
LCD monitor
3.5-inch LCD color monitor, 200,000 pixels
Viewfinder
0.44-inch LCD color viewfinder, 180,000 pixels
Internal microphone
Stereo microphone
Internal speaker
20 mm diameter

[AC ADAPTER]

Power Source:
110/120/220/240 V AC, 50/60 Hz
Power Consumption:
18 W

indicates safety information.

Weight
0.35 lb (0.16 kg)
Dimensions (W×H×D)
2 13/16×1 13/16×4 5/8 inches
(70×44.5×116 mm)

[OPTIONAL ACCESSORIES]

Wide conversion lens
AG-LW7208G
16:9 conversion lens
AG-LA7200G
XLR microphone
AG-MC100G
Hard carrying case
AG-HT100G
Soft carrying case
AG-SC100G
Battery
CGR-D08 (800 mAh)
CGR-D16 (1600 mAh: product equivalent to battery supplied)
CGP-D28 (2800 mAh)
AC adapter kit
AG-B15 (product equivalent to AC cable, DC cable and AC adapter supplied)
Cleaning tape
AY-DVMCL

Weight and dimensions shown are approximate. Specifications are subject to change without notice.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.